

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

+ + + + +

OFFICE OF ENVIRONMENTAL IMPACT REVIEW

+ + + + +

PUBLIC HEARING ON NORTH ANNA SITE PERMIT

+ + + + +

WEDNESDAY, AUGUST 16, 2006

+ + + + +

MINERAL, VIRGINIA

The meeting convened at the Louisa County Middle School, 1009 Davis Highway, Mineral, Virginia, at 7:00 p.m., Michael Murphy, Hearing Officer, presiding.

SPEAKERS:

MICHAEL MURPHY	Hearing Officer
PAMELA FAGGERT	Dominion
ELLIE IRONS	DEQ

COMMENTATORS:

HARRY RUTH
GENE BAILEY
GARY BREEDEN
JOHN CRUICKSHANK
VANTHI NGUYEN
ELINA DAY
TAMARA SYKES
LOUIS ZELLER
CHRISTOPHER PAINE
MORGAN BUTLER
PAXUS CALTA
MELISSA KEMP
MICHAEL IRELAND
BURTON MARSHALL

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

COMMENTATORS :

RICHARD BALL
WILLIAM MURPHEY
MICHAEL STUART
DELBERT HORN
STEVEN SWARTHET
KELLY TAYLOR
LISA STILES-SHELL
ALLAN LASSITER
KIT POWELL
TODD FLOWERS
SAMA BILBAO Y LEON
BARBARA CRUICKSHANK
JERRY ROSENTHAL
JIM ADAMS
PATRICK HANLEY
DONALD DAY
REBECCA FERRIS
CHRIS LLOYD
JASON PRIOR
DON MYER

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

<u>AGENDA ITEM</u>	<u>PAGE</u>
<u>WELCOME:</u>	
Michael Murphy	4/9
Ellie Irons	5
<u>DOMINION POWER:</u>	
Pamela Faggert	18
<u>COMMENTATORS:</u>	
Friends of Lake Anna - Harry Ruth:	24
People's Alliance Clean Energy - Gene Bailey	41
Aspen Hill Homeowners Assn. - Gary Breeden	44
Piedmont Group Sierra Club - John Cruickshank	45
People's Alliance Clean Energy - Vanthi Nguyen	48
People's Alliance Clean Energy - Elina Day	49
People's Alliance Clean Energy - Tamara Sykes	51
Blue Ridge Defense League - Louis Zeller	52
Natural Resource Defense - Christopher Paine	58
Southern Environmental Law - Morgan Butler	64
Nuclear Info. Research Service - Paxus Calta	67
Public Citizen - Melissa Kemp	71
Mike Ireland	82
Burton Marshall	88
Virginia Chapter Sierra Club - Richard Ball	91
Lake Anna Civic Assn. - William Murphey	96
NA-YGN - Michael Stuart	101
Dominion Employee - Delbert Horn	105
Steve Swarthet	109
Dominion Employee - Kelly Taylor	111
Lisa Stiles-Shell	118
Lake Anna Civic Assn. - Allan Lassiter	129
Kit Powell	135
Todd Flowers	138
NA-YGN - Sama Bilbao Y Leon	139
Barbara Cruickshank	144
Jerry Rosenthal	146
Jim Adams	150
Louisa Co. Chamber of Commerce - Patrick Hanley ...	153
Rebecca Ferris - Virginia Citizen	159
Chris Lloyd	164
Jason Prior	167/170
Don Myer	169
<u>ADJOURN:</u>	
Michael Murphy	171

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

P-R-O-C-E-E-D-I-N-G-S

6:59 p.m.

HEARING OFFICER MURPHY: Good evening. My name is Mike Murphy. I'll be the presiding officer for tonight's hearing. I'm with the Department of Environmental Quality. Before we begin the formal process of our hearing, first of all, I want to thank everyone for making time to be here with us tonight to help us with the Commonwealth's decision that we need to make on federal consistency for the project that we're going to describe shortly. But again, I want to thank everyone. I know there are a lot of other places you could be and it's gratifying to see such a good turn out.

Right now what I'm going to do is turn it over to DEQ's manager of our Office of Environmental Impact Review, that's Ms. Ellie Irons, who is going to talk briefly about our process, if you're not familiar with it, and then a little bit about what we're going to cover tonight. Then I will come back up and, unfortunately, we'll get a little bit more formal then.

Thank you again, everyone. Ellie?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MS. IRONS: Good evening, ladies and
2 gentlemen. Welcome to DEQ's public hearing for the
3 review of the Federal Consistency Certification
4 submitted by Dominion for its North Anna Early Site
5 Permit. The Federal Consistency Review for the project
6 has a very different focus than the review of the
7 Supplement to the Draft Environmental Impact Statement
8 for which the NRC had their meeting last night.

9 Comments on the transcript that you
10 submitted to the NRC meeting we cannot use those. We
11 will use the transcript from this meeting. DEQ and
12 reviewing agencies must determine whether the proposed
13 project, addition of the two units to North Anna Power
14 Station, if reserved under the NRC's ESP permit, is
15 consistent with Virginia's Coastal Resources Management
16 Program.

17 This program, we have enforceable policies
18 and we have a list of those policies outside on the
19 table. These enforceable policies are intended to
20 address the impacts of the proposed projects and
21 activities upon coastal uses and coastal resources. In
22 addition, DEQ must make sure that applicants and the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 federal licensing agencies take the Advisory Policies
2 of the Virginia Coastal Program into account.

3 Our displays in the hallway describe the
4 federal consistency process and its application to the
5 proposed project in greater detail. And we invite you
6 to look at the display and help yourself to the printed
7 handouts, if you have not already done so. In
8 particular, we have -- there is a white handout that
9 gives the Federal Consistency Overview and that tells
10 us what are authorities under the Coastal Zone
11 Management Act.

12 There is a second handout, which is
13 yellow, that is specific for this project and it tells
14 you what we are currently looking at and what the
15 applicable enforceable policies are. The authority of
16 our review stems from the Federal Coastal Zone
17 Management Act, because we have an approved Federal
18 Program, Coastal Program, here in Virginia. The
19 Department of Environmental Quality is the lead agency
20 for the Coastal Program, which is a network program
21 with several different state agencies making up the
22 program.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 The Office of Environmental Impact Review
2 in DEQ is the coordinating section for this review. So
3 we coordinate all the documents and consistency with
4 all the different federal consistency agencies and
5 public review is part of our coordination. Hence, we
6 are having this public hearing as part of our public
7 participation process.

8 The current review is about the --
9 contemplates the use of the closed cycle, wet/dry
10 cooling method, which would place the formal proposal
11 from a third reactor of using the once-through water-
12 cooled system. Unit 4 will still be air-cooled. The
13 intent of the review is to determine if the project, as
14 is now proposed, is consistent with the Coastal
15 Program. And the applicable enforceable programs will
16 be Fisheries Management, which is administered by the
17 Department of Game and Inland Fisheries and the
18 Virginia Marine Resources Commission.

19 Then we have the Point Source Pollution
20 enforceable policy and there are two programs under
21 this policy that would apply. Section 401 of the Clean
22 Water Act, which is a Water Quality Certification,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 administered through the Virginia Water Protection
2 Permit and the other is Section 404 of the Clean Water
3 Act, which is administered through the Virginia
4 Pollution, the VPDES permit at DEQ. And there is
5 another program that will be applicable and that's the
6 Non-Point Source Pollution Control administered by the
7 Department of Conservation and Recreation.

8 Under the Federal Consistency Regulations,
9 we have three options provided in our response back to
10 Dominion. First, we can concur that the project is
11 consistent with the Coastal Program. If we do this,
12 the NRC may issue their ESP. Bear in mind that they
13 still can deny the ESP, because they have a separate
14 review process. We can concur with conditions and in
15 that case, the NRC may issue the ESP as in the straight
16 concurrence, the NRC may still deny the ESP, despite
17 the state's concurrence.

18 Note, however, that the state cannot,
19 through the Coastal Zone Management Act, enforce its
20 condition after it has concurred. For this to happen,
21 the NRC must agree to those conditions and make it a
22 part of their ESP. The next option is that we can

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 object to the consistency and find it inconsistent with
2 our Coastal Program. If we do this, the NRC cannot
3 issue the ESP.

4 If you need any further information or
5 details about it, again, our display is in the hallway
6 and we would be more than happy to answer questions.
7 There are several staff out there willing to answer
8 your questions and to walk you through the process.
9 Thank you very much.

10 HEARING OFFICER MURPHY: Thank you.
11 Unfortunately, I've got to do some things that are
12 very, very formal and structured and last night I heard
13 one comment. I was here last night as well. I heard
14 one commentor refer to ourselves as just plain folks
15 and that's generally where I like to put myself. So
16 before I get formal, because I have to, I just wanted
17 to talk to you informally about how things will happen
18 tonight and what the expectations are from us and maybe
19 answer some very brief questions about just the
20 procedures tonight if you have any.

21 Again, I'm Mike Murphy with the Virginia
22 Department of Environmental Quality. We're presiding

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 over the hearing this evening. Ms. Irons is our
2 program manager for the office at DEQ that coordinates
3 this review with a number of other state agencies that
4 are part of Virginia's Coastal Program. You heard Ms.
5 Irons describe the enforceable policies and there is a
6 list of laws and regulations that go into that.

7 If you are here tonight and you have
8 signed up to speak, don't worry about that. Let us
9 figure out how to categorize your comments. We want to
10 hear from you. Come up and tell us what your comments
11 and concerns are. We will categorize them under those
12 enforceable policies. If they are not directly related
13 to enforceable policy, we will make sure that they are
14 sent to the appropriate agency.

15 We want to assure everybody that we are
16 going to look at every comment we get, respond to them
17 as best we can with the resources we have. Just like
18 last night, we are asking speakers to think of the
19 three to five minute range for your comments. We have
20 an agreement with the school that they would like us to
21 be out of here by 10:00. I'm going to do my best to
22 see that we can stick to that time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 From my initial glance at the number of
2 people that have signed up so far, I think we will make
3 that without any trouble. In fact, there may even be
4 some time at the end if you haven't registered and we
5 still have a few minutes, if you have heard something
6 that you want to get up and comment about, we may be
7 able to accommodate that as well.

8 And the last couple of things I want to do
9 is thank the other state agencies and also the Nuclear
10 Regulatory Commission, the NRC. They stayed over, some
11 of their staff. DEQ, we interact with a number of
12 federal agencies. I want to say thank you again to
13 them. I'm not sure I see anybody in the room right
14 now. They are down the hall with their display
15 probably, but they have been very accessible to us
16 throughout the process.

17 They have been very generous with
18 accommodating our requests for the review periods and
19 they have provided every document that we have asked
20 them for. It is a complicated matter to begin with,
21 because of the facility itself is a nuclear reactor and
22 also this Early Site Permitting process that Dominion

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 has applied for is a brand new process. I believe they
2 are among the first in the country to go through it.

3 So we appreciate everybody's help with
4 that and all the state agencies that came out tonight.

5 Any questions about process or procedure? What I'm
6 going to do is introduce, before questions -- someone
7 from Dominion has signed up and will represent the
8 organization, since they are the applicant. I don't
9 know that we have any elected officials. I don't
10 believe any have come forth yet. Generally, we let
11 them go second.

12 And then Mr. Ruth, who has signed in as
13 representing a larger organization, and so several of
14 you have signed up contributing your time to him. I'll
15 introduce him as well. And then I'll go to the list
16 and we'll just go in order as signed in until we get to
17 the end. So for the other speakers, if you could think
18 in the three to five minute range, unless you have
19 identified yourself as representing a group and you are
20 going to be the only spokesperson for that group, I
21 have that noted on the sheet and I'll take care of that
22 when we get to it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Any questions about the process tonight,
2 please? Okay. Now for the part that I'm not as good
3 at, so it's written down for me, so I can read it.
4 Please, bear with me.

5 Good evening. It is Wednesday, August 16,
6 2006. I'm calling this public hearing to order. My
7 name is Michael Murphy. I'm the Director of the
8 Division of Environmental Enhancement at the Virginia
9 Department of Environmental Quality and I am going to
10 serve as the Hearing Officer this evening. Our
11 Division includes the Virginia Coastal Program and the
12 Office of Environmental Impact Review.

13 At this time, I would like to introduce
14 our impact review staff: Ms. Irons in the back of the
15 room is our program manager and the remaining staff in
16 the office are Charlie Ellis, John Fisher and Ernie
17 Aschenbach in the back. Thank you again. They have
18 done a lot of work getting this ready for this evening.

19 The Department of Environmental Quality is
20 holding this hearing to receive comments on the Federal
21 Consistency Certification submitted by Dominion Nuclear
22 North Anna LLC, hereinafter will be referred to as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Dominion, pertaining to its Early Site Permit
2 application to the Nuclear Regulatory Commission to
3 determine the suitability of its North Anna Power
4 Station site with a possible addition of two new
5 nuclear power units.

6 Notice of this hearing was published on
7 the Department of Environmental Quality's website on
8 June 15, 2006, in the Richmond Times Dispatch on July
9 2, 2006, in the Lake Anna Observer on July 15, 2006, in
10 the Fredericksburg Free Lance-Star on July 30, 2006.
11 The public hearing is authorized under the Federal
12 Coastal Zone Management Act of 1972, as amended, and
13 there is a Federal Register citation of Part 930,
14 Section 930.61(a). The Commonwealth of Virginia will
15 ultimately decide whether to concur with conditions or
16 object to Dominion's Federal Consistency Certification.

17 If the proposed project is found to be
18 consistent with the enforceable policies of the
19 Virginia Coastal Resource Management Program and if the
20 Nuclear Regulatory Commission should later issue its
21 Early Site Permit, Dominion would thereby secure a site
22 at its existing North Anna Power Station in Louisa

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 County for the possible future construction of two new
2 reactor units.

3 Let me emphasize that the focus of
4 tonight's hearing and the Federal Consistency
5 Certification is whether the project, as proposed by
6 Dominion, is consistent with enforceable policies of
7 the Virginia Coastal Resources Management Program.
8 That is we are asking for your comments on whether and
9 to what extent the proposed project will affect coastal
10 resources or coastal uses in Virginia's coastal area.
11 That includes, in this case, Spotsylvania County and
12 the North Anna River and all points downstream. We are
13 asking for your comments with regard to whether or not
14 that project is consistent or inconsistent with the
15 state policies.

16 We're getting there. During this
17 proceeding, your oral statements pertaining to the
18 consistency of this proposal are welcome. In addition,
19 written comments concerning this consistency
20 certification may be submitted until the end of the
21 public comment period, which will conclude on September
22 8, 2006.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 All written comments are to be sent to Ms.
2 Ellie Irons at the Department of Environmental Quality.

3 We have this written down, but I need to read it in.
4 The Office of Environmental Impact Review, 629 East
5 Main Street, Richmond, Virginia 23219. All of that
6 information is on the handout sheets in the back as you
7 came in.

8 When you entered this evening, you were
9 asked to register if you wished to testify. If you
10 registered to speak, but now wish to donate your
11 allotted time to another person, you still have that
12 option. All comments offered this evening will be
13 recorded by a Court Reporter, who is here tonight to
14 make a transcript of this hearing, back in the upper
15 corner here.

16 We ask that everyone speak directly into
17 the microphone, so that we can pick up your testimony.

18 Please, be assured that we will consider all relevant
19 information that you present regarding the consistency
20 certification.

21 The general procedure for the hearing will
22 be as follows: First, I will call on Ms. Pamela F.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Faggert, Vice President and Chief Environmental Officer
2 of Dominion, who is going to present comments on behalf
3 of the project applicant, Dominion. Following Ms.
4 Faggert, I will next call on Harry N. Ruth, who is
5 representing the Friends of Lake Anna. To my
6 understanding, I just was informed before I came up
7 that a number of speakers, a number of persons have
8 registered to speak, but they have now yielded their
9 time to Mr. Ruth. Mr. Ruth will have between 10 to 15
10 minutes for his comments.

11 Following Mr. Ruth, I will begin calling
12 on those persons that have indicated on the sign-in
13 forms that they wish to testify on the Federal
14 Consistency Certification. The time limit for each
15 individual registered to speak will be between three
16 and five minutes. If you receive time that has been
17 donated by another registered speaker, that time will
18 be added to your time, up to a maximum of 10 minutes
19 for any one person.

20 Before we begin with your testimony,
21 please, state into the microphone your name and
22 affiliation clearly, so that the transcript will

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 accurately identify all speakers. I will make every
2 effort to ensure that everyone wanting to testify has
3 the opportunity to be heard. We, by agreement with the
4 school, however, are expected to close tonight's
5 hearing by 10:00 p.m.

6 If you also wish to submit a written
7 statement or a copy of your comments, please, leave it
8 on the table in this box right here as you finish your
9 testimony. That being said, I'm going to call on our
10 first speaker, Ms. Pamela F. Faggert, Vice President
11 and Chief Environmental Officer, Dominion. And,
12 please, as you come up be careful of the cords on the
13 floor. I apologize for that, but we don't have any
14 better way to do it tonight. Thank you.

15 MS. FAGGERT: Thank you, Mike. Good
16 evening. My name is Pam Faggert and I am Vice
17 President and Chief Environmental Officer for Dominion
18 Resources. Three years ago Dominion applied to the
19 U.S. Nuclear Regulatory Commission for an Early Site
20 Permit for possible new reactors at North Anna.

21 An Early Site Permit or ESP allows a
22 company such as Dominion to bank a site for 20 years as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 being a suitable location. If Dominion decided to
2 build and operate a new nuclear unit, a separate
3 construction and operating license would be required
4 from the NRC as well as numerous state and federal
5 environmental permits.

6 As part of the ESP application process, we
7 need to obtain certification from the Commonwealth of
8 Virginia that the planned activities are consistent
9 with Virginia's Coastal Zone Management Program as
10 approved under the Federal Coastal Zone Management Act.

11 Virginia's program is administered by a
12 network of state agencies and is coordinated by the
13 Department of Environmental Quality. The program is
14 designed to protect the Commonwealth's Coastal Zone
15 resources, including wetlands, fisheries, coastal
16 lands, air quality and water quality.

17 After submitting voluminous information
18 and extensive discussions with Agency staff and the
19 public, we believe we have demonstrated that our Early
20 Site Permit application is consistent with Virginia's
21 Coastal Zone Management Program and that the
22 consistency certification should be issued.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Since its construction and first
2 operations in the late 1970s, Dominion has operated
3 North Anna safely and in an environmentally responsible
4 manner. The company has embraced policies that work
5 hand-in-hand with protecting and enhancing surrounding
6 natural resources.

7 Last night an issue was raised about
8 warmer temperatures in the main part of Lake Anna.
9 During summer months it is normal to see higher
10 temperatures simply due to the hotter summer days.
11 With temperature monitoring stations throughout the
12 Waste Heat Treatment Facility and the lake and through
13 multiple years of studies that document temperature
14 fluctuations due to both natural causes and station
15 generation, North Anna remains in full compliance with
16 the state and federal permit requirements.

17 These federal and state requirements allow
18 for higher water temperatures based on extensive
19 studies conducted in the lake. These studies have and
20 continue to demonstrate that the lake provides for the
21 protection and propagation of a balanced indigenous
22 population of fish and wildlife or, in other words, is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 protective of the environment.

2 Additionally, we have a long history of
3 partnering with the public and the state in pursuing
4 environmental stewardship projects. We are especially
5 proud of our partnership projects at the Lake Anna
6 State Park. This commitment carries over to the Early
7 Site Permit process.

8 We have planned to use a once-through
9 cooling system for the possible third reactor, but
10 concerns expressed by the DEQ, other state regulatory
11 agencies and some local citizens about the potential
12 impact on Lake Anna and downstream flows from
13 additional warm water being released into the adjacent
14 Waste Heat Treatment Facility led us to look for an
15 innovative cooling system that minimizes thermal
16 impacts and reduces water evaporation.

17 The result is that if the company does
18 decide to build another nuclear reactor, we have agreed
19 to spend an additional \$200 million to install a
20 cooling tower system so that virtually no additional
21 heat is added to the Waste Heat Treatment Facility or
22 to the lake. This closed cycle cooling approach will

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 use a combination of wet and dry towers that will also
2 result in very little additional water flows from the
3 station.

4 However, while this will reduce water
5 evaporation, some makeup water will still be needed for
6 the wet cooling portion of the system to operate
7 properly. The cooling system will be designed and
8 operated to reduce water evaporation especially during
9 any long, dry periods to reduce the effects on lake
10 levels and downstream releases from the dam. We will
11 be working cooperatively with Agency staff and the
12 public to achieve this goal.

13 With this change to the cooling system,
14 the NRC's preliminary recommendation and the supplement
15 to the Draft Environmental Impact Statement for an
16 Early Site Permit of the North Anna ESP site published
17 this past July is to issue the Early Site Permit. This
18 recommendation is based on the environmental report
19 submitted by Dominion to the NRC, consultation with
20 federal, state, tribal and local agencies, the NRC
21 staff independent review and the NRC assessment
22 summarized in their Draft Environmental Impact

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Statement and supplement.

2 Tonight is another step with many more to
3 come to bring additional supplies of electricity to
4 Virginia. The state continues to grow, as demonstrated
5 by the more than 50,000 new customers that Dominion
6 connects to its electricity grid every year. We expect
7 the demand for electricity in Virginia to increase by
8 30 percent between 1998 and 2015.

9 Virginia remains an attractive state in
10 which to do business. Unemployment is low and the
11 quality of life is high. Granting state certification
12 under the Coastal Zone Management Act will be another
13 step in the regulatory approval path towards giving our
14 customers the assurance of continued reliable
15 electricity and in doing so, we're also ensuring that
16 the environment is protected. Thank you very much.

17 HEARING OFFICER MURPHY: Thank you, Pam.
18 Unlike last night, I was remiss in not saying that we
19 do not take questions and answers. This is simply
20 testimony for the record and we record a transcript.
21 We're interested in hearing from you and your comments
22 and we would like to get everyone to have an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 opportunity to speak tonight.

2 Our next speaker then is Harry Ruth
3 representing the Friends of Lake Anna. Mr. Ruth?

4 MR. RUTH: Dear Virginia Department of
5 Environmental Quality, ladies and gentlemen, my name is
6 Harry Ruth. I reside at 230 Heather Drive, Bumpass,
7 Virginia and I live on Lake Anna. I represent the
8 Friends of Lake Anna.

9 In the interest of time, I'm going to skip
10 over some of the numbers and everything. Then I'm
11 going to cite a few laws and things like that. So I'm
12 going to abbreviate it, but I'm going to forward the
13 letter that I have here to VDEQ tomorrow.

14 The Friends of Lake Anna is a citizens
15 group representing 2,650 persons whose mission is to
16 protect Lake Anna, both main reservoir and cooling
17 lagoons, and its surrounding landscape for the health,
18 safety and welfare of current residents and for the
19 future generations. We are not anti-nuclear nor do we
20 have a "not in my backyard" sentiment.

21 Our goal is simply to protect Lake Anna
22 for the half a million plus annual users and ensure

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 compliance with the law. We believe that the U.S.
2 should become self-reliant for energy sources and not
3 be dependent on foreign oil, but we do want to promote
4 the wise and safe use of nuclear energy and not have
5 the impact of the new nuclear reactors destroy Lake
6 Anna in the process.

7 If the project at North Anna plant is
8 accomplished correctly and takes into account our
9 concerns, possibly the new reactors could become a
10 model for the continued growth of nuclear energy
11 throughout the country. We do support the addition of
12 the third and fourth nuclear reactors at the plant, but
13 we want to ensure that all environmental issues are
14 taken care of prior to the issuance of either an NRC
15 Early Site Permit or a Federal Consistency
16 Certification.

17 I am now going to go through each one of
18 the items. We believe that the current ESP program is
19 inconsistent with -- the ESP proposal is inconsistent
20 with the Coastal Zone Management Program. We have
21 different issues. One of them is related to Fisheries
22 Management. The Department of Game and Inland

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Fisheries has found that the fish will continue to be
2 adversely affected even if the changes to the third
3 reactor have been made.

4 The Department also continues to have
5 reservations about the impact of the proposed Unit 3 on
6 the lake and the downstream resources. According to
7 Game and Inland Fishers, the downstream impacts to the
8 fisheries resources were ignored in the Draft EIS in
9 spite of the increased frequency of low flows that a
10 third water-cooled reactor or water-cooled combination
11 unit would produce.

12 Given the addition of a third unit using
13 water, the expected drought frequency would increase
14 seven months out of the year. Placing the population
15 of aquatic species under the frequent drought stress
16 will shift the community substantially. Recent
17 Department of Game and Inland Fisheries surveys of the
18 North Anna River have suggested that the primary sport
19 fish, smallmouth bass, is much less abundant than in
20 other rivers in the region. Using 100 percent air
21 cooling for Unit 3 would eliminate this concern.

22 The North Anna River is a spectacular

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 scenic and remote canoeing river with excellent
2 fishing, according to the Department of Conservation
3 and Recreation. Accordingly, discharge rates for the
4 Lake Anna Dam should be adequate to meet minimum in-
5 stream flows needed for recreational boating from State
6 Route 601 to U.S. Route 301. The Department of
7 Conservation and Recreation recommends that a minimum
8 in-stream flow recreation study be conducted to
9 determine what this discharge rate would be.

10 We are concerned with point source
11 pollution controls. There's two federal regulations
12 that are affected. I am just going to simply refer to
13 them as Section 401 of the Clean Water Act and 402 of
14 the National Pollution Discharge Elimination System,
15 which is delegated by the U.S. Environmental Protection
16 Agency to the Virginia Department of Environmental
17 Quality.

18 As stated, the Department of Environmental
19 Quality's analysis of the Draft NRC Impact Statement
20 for the North Anna, they said the North Anna Watershed
21 is too small to enlarge water withdrawals. It would
22 adversely affect the beneficial uses of the North Anna

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 River, which flows into the Pamunkey River, which flows
2 into the Chesapeake Bay and then into the Atlantic
3 Ocean.

4 Both the DGIF and VDEQ analysis clearly
5 indicates that the third unit would increase the
6 drought cycle and cause decreased water flows during
7 March, April, May, June, July, August and October,
8 seven months out of the year. The Department of Water
9 Resources in Virginia also has some concerns.

10 The NRC Draft Environmental Impact
11 Statement, which you heard about last night, analyzes
12 water resources and quality impacts considering the
13 addition of the proposed third unit as a closed cycle
14 wet/dry cooling unit and Unit 4 as a dry-cooled unit
15 and having negligible effects on the water supply, so
16 it would be very small, not a big deal.

17 Although the new cooling method would use
18 less water, indications are that this small watershed
19 cannot sustain any additional water withdrawals. The
20 addition of the third unit would increase the drought
21 reoccurrence interval as well as increase the total
22 weeks of flows that are 20 cubic feet per second or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 lower.

2 The Virginia State Water Control Board had
3 put out different bulletins that reviewed this and one
4 was down at Doswell. The addition of the third unit
5 would increase the frequency of drought flows
6 downstream and the duration of those droughts.
7 Significant changes in the drought flows have occurred
8 since the plant and the reservoir have been
9 constructed.

10 They also evaluated other east coast
11 nuclear reactors. In the earlier review of the
12 Environmental Impact Statement, the Division of Water
13 Resources looked at other nuclear reactors along the
14 east coast to compare the water resources available to
15 them with the water resources available at North Anna.

16 The conclusions drawn from the research
17 are most of the intake locations are tidal and have an
18 essentially unlimited water supply. Of the remaining
19 locations, the North Anna location has the least
20 abundance of water supply based on the average flow of
21 a small watershed, it's only 342 square miles, and a
22 medium sized reservoir.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 There is a limited number of nuclear power
2 stations located in non-tidal waters. In these cases,
3 the power plants are on large rivers such as the
4 Connecticut and Susquehanna and they have a large free-
5 flowing water body that carries the heat away. In
6 fact, the only location remotely similar to North
7 Anna's situation is on Lake Keowee in South Carolina.

8 However, immediately below this lake is
9 Hartwell Lake, so the section of a non-tidal stream
10 affected by consumptive loss is very short. The
11 cumulative impacts and the downstream effects of the
12 current and future units on downstream hydrology and
13 biology need to be quantitatively evaluated before any
14 determination can be made that effects the proposed
15 addition of reactors to this site are small, and that
16 is what the NRC said.

17 The starting point for this cumulative
18 impact analysis should be before the existing two
19 reactors were put into operations. Even though the
20 proposed withdrawal has decreased from the previous
21 method, the withdrawal still remains significant with a
22 small watershed. At a minimum, VDEQ must provide an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 independent analysis of the cumulative impact taking
2 into consideration worst case scenarios that includes
3 the 2001/2002 draft. Very conveniently, the NRC Impact
4 Statement didn't do that.

5 Section 402 of the Clean Water Act is
6 administered by the Environmental Protection Agency
7 through a National Program and then they in turn
8 delegate that then down to Virginia. The water
9 temperature currently exceeds the temperature necessary
10 to protect aquatic resources and the beneficial uses of
11 national waters.

12 Any additional temperature increases,
13 i.e., the blow-down discharges of the water cooling
14 towers, would be detrimental to the coastal resources
15 and would affect coastal uses, fisheries, aquatic life,
16 public access and recreation. Further increase in
17 water temperatures would only compound the current
18 problems.

19 First, VDEQ, the Virginia Department of
20 Environmental Quality, must prevent the existing
21 violation of the current Virginia permit and the Clean
22 Water Act with just the two existing units which are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 increasing the temperatures of the entire lake. Recent
2 Lake Anna Civic Association water studies have
3 indicated that the North Anna River, three miles before
4 it enters Lake Anna, is 13 degrees cooler than the
5 central part of the lake above the Route 208 bridge.

6 Many areas of the entire lake, both the
7 main reservoir and cooling lagoons, have recently
8 experienced temperatures in the low to high 90s which
9 clearly exceeds the 89.6 degree fahrenheit temperature
10 limitation in the Clean Water Act, as defined in the
11 National Program. Some residents have even reported
12 temperatures as high as 106 degrees. The entire lake
13 is being heated as a result of the current power plant.

14 The Clean Water Act applies to the Lake
15 Anna Reservoir and cooling lagoon ponds. Moreover,
16 cooling ponds are considered navigable waters of the
17 U.S. In addition, the U.S. Army Corps of Engineers who
18 administers Section 404, which is dredge and fill of
19 navigable waters in the U.S., requires the issuance of
20 404 permits for dredge and fill activities in the
21 cooling lagoons.

22 This is predicated on the determination by

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 the Army that the cooling lagoons are jurisdictional
2 waters in the United States. The definition for waters
3 in the United States under 404 implementing regulations
4 is identical to all the necessary respects to that of
5 the National Program.

6 VDEQ must fully analyze the impact of any
7 further water temperature increases resulting from the
8 blow-down discharges of the proposed Unit 3 cooling
9 towers or any malfunction of their proposed cooling
10 towers or current generating units. Existing Units 1
11 and 2 periodically exceed Clean Water Act limitations
12 and any additional temperature increases by the
13 proposed cooling towers will only exacerbate the
14 situation.

15 VDEQ must also correct the existing
16 Virginia regulations that exempt the cooling lagoons
17 from the definition of surface waters. These are in
18 conflict with the National Program which states that
19 cooling lagoons, cooling ponds which meet the
20 definition of waters of the U.S. are not waste
21 treatment systems.

22 There is no question that the cooling

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 lagoons are waters of the U.S. and, as such, are
2 subject to three federal regulations. They are 404,
3 402 and 401. Virginia and the Virginia State Water
4 Control Board do not have the authority to
5 denationalize national waters and designate Lake Anna
6 cooling lagoons as a Waste Heat Treatment Facility.

7 The U.S. Environmental Protection Agency
8 must reevaluate the authority delegated to the
9 Commonwealth of Virginia and ensure that the Virginia
10 Program is not less stringent than the National
11 Program. Federally delegated programs, such as the
12 Virginia Program, can be more stringent than the
13 National Program, but cannot be less or that authority
14 can be taken away from the state.

15 The Virginia State Water Control Board
16 cannot arbitrarily exclude U.S. surface waters from its
17 regulatory purview of it's delegated National Program.

18 Monitoring now, the Virginia Program must begin at the
19 end of the North Anna Power Plant Discharge Canal since
20 the cooling ponds are national waters. Waters of the
21 Lake Anna cooling ponds reached 106 degrees on August
22 3rd of this year, as recorded by local residents. Lake

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Anna Civic Association Water Quality Team recorded
2 104.6 at the end of the discharge canal on the same day
3 at a different time.

4 The Lake Anna Civic Association also
5 reported that waters in the North Anna River three
6 miles before it enters the lake were 13 degrees cooler
7 than the central part of the lake above the 208 bridge.

8 The current limits for 89.6 for non-tidal waters
9 established by the U.S. Clean Water Act have been
10 violated many times by Dominion throughout the entire
11 lake.

12 In addition, the U.S. Clean Water Act
13 defines that the affluent discharge into Lake Anna
14 shall not be increased more than 6.3 degrees above the
15 natural water temperature. That is fahrenheit.
16 Therefore, recent Lake Anna Civic Association studies
17 have shown that the natural North Anna River
18 temperatures to be, approximately, 72 degrees was
19 translated in the U.S. Clean Water Act. Requirements
20 indicate Lake Anna water temperatures should not be
21 exceeding about 78.3 under current conditions, maybe a
22 little warmer due to some sun heat-up, fluctuate a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 couple of degrees during the day.

2 Dominion has a current variance from the
3 Virginia permit under Section 316(a) which reflects the
4 thermal discharges of the Clean Water Act. However,
5 this variance is for the vicinity of Dike 3 discharge
6 and in the shallow reaches near its tributaries.

7 Whenever the current permit is renewed, as
8 essential, the VDEQ renewal process includes a detailed
9 review of any previous variances given. Variances
10 cannot be granted to a commercial utility company for
11 life or we could be faced with 150 degree fahrenheit
12 lake temperatures with the public having no recourse.

13 Local condition change in the permit
14 renewal process must be proactive in soliciting public
15 comments prior to the draft of a new permit to ensure
16 that it is as stringent or more stringent than the EPA
17 delegation to the state of the Clean Water Act.

18 The Virginia process must examine whether
19 local conditions have changed the increased use of the
20 lake by the public for recreation. Heating the entire
21 lake to 90 degree temperatures create unhealthy
22 conditions prior to any reissuance of the waiver. The

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Clean Water Act variance does not and should not permit
2 the entire Lake Anna to be heated to unhealthy
3 conditions. The Clean Water Act also anticipates that
4 the water discharge would occur under free-flowing
5 river or ocean, so the heat transfer would be carried
6 downstream. Not be an impairment with little water
7 flow that heats up throughout.

8 U.S. Code Title 33, different sections,
9 one being 1312 of the Clean Water Act references water
10 quality related to affluent limitations indicates that
11 the limitations should be imposed on those affluents
12 that would not interfere with the attainment of water
13 quality and a specific portion of the water is to
14 protect the public health, shellfish, fish, wildlife
15 and a lot of recreational activities in and on the
16 water.

17 Section 1313 of the Clean Water Act,
18 whereby quality standards and implementation plans,
19 also indicates that the water quality standards are
20 there to protect the public health and welfare, plus
21 fisheries and wildlife and recreational and for
22 interest state waters and they should be reviewed at

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 least once every three years.

2 Section 1326 of the Clean Water Act, with
3 reference to thermal discharges, indicates more
4 stringent thermal discharges be imposed to ensure the
5 protection and provocation of shellfish, fish and
6 wildlife in the body of the water. The entire Lake
7 Anna is unique and is primarily an impairment where 99
8 percent of the water is recirculated which in turn
9 causes the entire lake to heat up, since about 1
10 percent of the water is released over the dam.

11 The permit is one of the enforceable
12 policies of Coastal Program and if the current 316(a)
13 variance granted by the Virginia Program is in
14 violation, it follows that any future permit will also
15 be in violation. There is inconsistency with the
16 Advisory Policies. One set of the North Anna River
17 should not benefit at the expense of another set of
18 users.

19 There should be an alternative cooling
20 method which is the dry air cooling method is what we
21 recommend that be used for the third unit. We also
22 have other related concerns that relate to that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 temperatures should be no more than 104 degrees at the
2 end of the discharge canal. Human health problems due
3 to increased water temperatures and bacteria, the
4 impact to fish, wildlife, endangered species, the bald
5 eagle nest, raising of the lake level, lowering of the
6 lake levels, the height of the dry and wet cooling
7 towers, the impact of 5,000 to 7,000 new workers, what
8 that's going to do to our roads and schools and is the
9 Federal Government going to give us some grants, Louisa
10 County, similar to the \$8 to \$10 million grant that
11 they gave to Dominion for processing the Early Site
12 Permit, concern about emergency evacuation on the small
13 two lane roads, spent nuclear fuel, terrorist attacks
14 and the impact of additional fog and icing from the wet
15 cooling towers.

16 I would like to thank you for listening to
17 me. I know it was a lengthy thing, but it's something
18 that we spent a lot of time researching thousands of
19 pages of documents, so that we could be here tonight
20 and give you those results. Thank you very much.

21 (Applause)

22 HEARING OFFICER MURPHY: Thank you, Mr.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Ruth. It's our understanding you will be submitting
2 your comments that you offered tonight later? Your
3 written comments later?

4 MR. RUTH: The stack is here.

5 HEARING OFFICER MURPHY: Next up, we do
6 have several other groups that have indicated they are
7 here tonight and I'm going to get to them in a minute.
8 I have a favor to ask of the People's Alliance for
9 Clean Energy, three separate individuals have signed up
10 to speak. It would be our preference that one person
11 be designated to be the primary speaker. The other two
12 will drop back into the regular order with three to
13 five minutes. The one person would then have 10
14 minutes.

15 PARTICIPANT: I'll be brief.

16 HEARING OFFICER MURPHY: Very brief?

17 PARTICIPANT: Yes.

18 HEARING OFFICER MURPHY: Okay. Beg your
19 pardon?

20 PARTICIPANT: I said I would hate to see
21 if he was against that.

22 HEARING OFFICER MURPHY: But before we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 start with the groups, there was a gentleman that was
2 here very early this evening, signed up first and asked
3 if he could go ahead in his first order, because he has
4 another commitment and that's Mr. Gene Bailey.

5 MR. BAILEY: Yes, sir.

6 HEARING OFFICER MURPHY: Please, be
7 careful of the cords.

8 MR. BAILEY: Yes, sir. Good evening.
9 Ladies and gentlemen, I'm Gene Bailey. I serve as
10 President of the Fredericksburg Regional Alliance. It
11 is a public/private partnership created to promote
12 economic development. My comments this evening
13 emphasize the positive, short and long-term economic
14 impact this project will have.

15 The current global business climate
16 sharply reinforces the need for lower energy cost at a
17 time when many businesses face lower profits and
18 increased pressure to export jobs to other countries,
19 likewise, a lower energy cost or a significant
20 advantage when trying to attract companies and new
21 businesses to our region. At a time of outsourcing and
22 \$2 an hour foreign labor, the cost of energy remains

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 the major factor in the ability of any company to make
2 a profit.

3 The construction and operation of an
4 additional unit at North Anna would result in strong
5 stimulus to the local economy. The creation of some
6 750 new jobs with annual salaries over 200 percent
7 above the average salary level in the area would be
8 extremely positive for the economy now and in the
9 future. These jobs perform exceptionally well at a
10 time when the economy may be turning down, thereby
11 adding to the overall resilience to the overall
12 economy.

13 The community will fare far better during
14 a period of national economic uncertainty when faced
15 with the positive aspect of job creation resulting from
16 over \$2 billion of new construction spending. The
17 ripple effect through the economy of increased salaries
18 and wages will put food on the table, park a newer
19 vehicle in the front yard, put our children through
20 school and help pay for health and dental care.

21 The overall stimulus to job creation and
22 high disposable incomes from this project will be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 nothing short of phenomenal. Thank you for the
2 opportunity to speak. Thank you.

3 (Applause)

4 HEARING OFFICER MURPHY: Okay. Our next
5 series of speakers have all identified themselves as
6 representing groups, which means we would like to see
7 the comments between 5 to 10 minutes, please. The next
8 speaker will be Gary Breeden, President of the Aspen
9 Hill Homeowners Association. Following Mr. Breeden
10 will be John Cruickshank, if I can read that correctly,
11 if you could be ready as well, John. Please, be
12 careful as you approach the podium. It's not exactly
13 one of the safest places. Thank you for coming this
14 evening.

15 MR. BREEDEN: Thank you. My name is Gary
16 Breeden. I'm a licensed controller operator at North
17 Anna. I have lived in Louisa County for the last 15
18 years. My house is located less than 2 miles from
19 North Anna in the Aspen Hill subdivision. I'm
20 currently the President of Aspen Hill Homeowners
21 Association. I have been the president for the last 12
22 years.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 A few years ago at the Lake Anna Civic
2 Association two issues arose that needed to be
3 addressed. One was the lake level. I fully support
4 the Lake Anna Civic Association that the flow over the
5 dam needs to be reduced when the lake level drops below
6 250 feet. Right now, the lake level is at 249.5 and
7 we're still discharging that full minimum flow
8 discharge. That rate needs to be reduced during times
9 of drought periods.

10 The second issue is the water temperature.
11 With the addition of the wet/dry cooling towers for
12 Unit 3, I believe the Virginia Power has addressed this
13 issue. Aspen Hill is located on the first lagoon of
14 the Waste Heat Treatment Facility. I hate that name
15 just as much as anybody else.

16 Dominion owns one side of the lagoon and
17 we're located on the other side. Right now, the
18 temperature at the discharge plant is over 100 degrees.

19 But even with the temperatures that high, the first
20 lagoon will be just as congested as the rest of the
21 lake this weekend. Even though I can't speak for all
22 members of the Aspen Hill Homeowners Association, I can

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 say that our annual meeting in May we did discuss the
2 construction of Unit 3 and 4 and we do support the
3 issuance of this license. That's all I have to say.

4 (Applause)

5 HEARING OFFICER MURPHY: Mr. John
6 Cruickshank, Sierra Club, and then Ms., is it, Nguyen?

7 MR. CRUICKSHANK: Thank you, sir.

8 HEARING OFFICER MURPHY: Be careful.

9 MR. CRUICKSHANK: Yes. Good evening. My
10 name is John Cruickshank. I live in Albemarle County
11 and I am speaking as a representative of the Piedmont
12 Group of the Sierra Club. Piedmont Group has 1,160
13 members in central Virginia, including many who live in
14 Louisa, Fluvanna and Orange Counties.

15 The Sierra Club is opposed to the
16 construction of additional reactors at North Anna.
17 These reactors will have serious consequences for the
18 water quality in Lake Anna, the York River Watershed
19 and ultimately the Chesapeake Bay. The proposed hybrid
20 cooling tower system will result in the evaporation of
21 25 to 37 cubic feet of water per second. This level of
22 water evaporation during droughts will have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 unacceptable impacts for those who live near the lake
2 and downstream.

3 What will this do to drinking water,
4 recreational fishing and property values in this area?

5 It could be disastrous. Each reactor at North Anna
6 generates about 20 metric tons of highly radioactive
7 waste per year and yet, there is no approved plan for
8 the disposal of this spent fuel. It will most likely
9 be stored at the North Anna site indefinitely in pools
10 and casks above ground that pose serious health and
11 safety, health and security risks for the people of
12 Virginia.

13 Increased nuclear waste creates more
14 dangers from terrorism in the proliferation of nuclear
15 weapons. The U.S. Nuclear Regulatory Commission
16 doesn't even require nuclear power plants to protect
17 themselves against rocket propelled grenades that can
18 be purchased for \$10 in the world's arms bazaars.

19 I read through this Lake Anna Visitor and
20 Vacation Guide yesterday and found it interesting that
21 the words nuclear and reactor never appear on any of
22 the 76 pages. The publisher was wise, because most

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 people do not want to vacation near nuclear reactors or
2 radioactive waste. Will two additional reactors make
3 this a more attractive place to live or visit?

4 In fact, new reactors will damage the
5 environment, threaten the health and safety of
6 Virginians and lower property values in the surrounding
7 area. In every country where nuclear energy
8 flourishes, it does so only because of enormous public
9 subsidies. Our nation's money would be better spent on
10 energy efficiency, conservation and renewables. The
11 Sierra Club encourages the DEQ to oppose new reactors
12 at North Anna. Thank you.

13 (Applause)

14 HEARING OFFICER MURPHY: Thank you. Our
15 next speak then would be Ms. Nguyen with the People's
16 Alliance for Clean Energy followed by Mr. Day. Please,
17 be careful of the wires. I apologize.

18 MS. NGUYEN: Good evening. My name is
19 Vanthi Nguyen and I'm with the People's Alliance for
20 Clean Energy. I'm here to present Ms. Ellie Irons of
21 the DEQ with a stack of comments by Virginia citizens
22 urging the DEQ to oppose the construction of more

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 nuclear reactors on Lake Anna. The health of our soil,
2 air and water is precious to us. We know that our
3 well-being and our happiness depends on living in
4 ecological balance.

5 Nature recycles our water and once it is
6 compromised cannot be fixed or manufactured by any new
7 technology. We are very concerned about the negative
8 impacts of increased temperature, increased evaporation
9 and also increased radioactivity of more new reactors
10 on Lake Anna, not only on the lake, but also downstream
11 on the entire watershed and indefinitely into the
12 future.

13 We do not feel satisfied with the NRC's
14 review and ask the DEQ to look deeper into the
15 situation and to oppose the construction of more
16 nuclear reactors. Thank you.

17 (Applause)

18 HEARING OFFICER MURPHY: Thank you. Next
19 up is Elina Day followed by Tamara Sykes.

20 MS. DAY: Hi, my name is Elina Day. I'm
21 with the People's Alliance for Clean Energy. And I
22 just want to urge DEQ to examine the Supplemental DEIS

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 very, very closely, because I feel that the NRC didn't
2 so such a great job, you know, stressing only small and
3 minimal impacts of new reactors being built at Lake
4 Anna. I believe that the impacts are greater than we
5 realize.

6 I think that the DEQ needs to also look at
7 what's going on with the current reactors and the fact
8 that we do have warmer summers, because we are, I
9 guess, experiencing global warming. I think the
10 situation has probably changed within the last 10 or 15
11 years, probably there are higher rates of evaporation
12 and there are dwindling flows downstream.

13 I think coupled with that, there are
14 actually four counties downstream that want to tap that
15 watershed, the Pamunkey, York Watershed for water for
16 their increasing populations. I think that DEQ should
17 not only have this hearing, but should have hearings in
18 downstream counties that are also affected by building
19 two new -- the possibility of building two new reactors
20 on Lake Anna.

21 I think perhaps this is a regional issue.

22 I think that we shouldn't waste our water resources to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 allow Dominion to build two new nuclear generating
2 units to generate electricity when there are
3 alternatives. Just don't waste Virginia's water
4 resources. And I beg the DEQ to consider that.
5 Furthermore, there is more to life than just good jobs
6 and a new car in the driveway. I just am referring to
7 the previous speaker. I think that our health, our
8 safety and -- is probably more important.

9 (Applause)

10 MS. DAY: I just want to give you all
11 this. This is about the French and how they are
12 discharging hotter water into --

13 HEARING OFFICER MURPHY: Yes, ma'am.
14 Would that be added into the record?

15 MS. DAY: Could you?

16 HEARING OFFICER MURPHY: Yes, please.
17 I'll make sure it gets in. Next up is Tamara Sykes and
18 then Mr. Zeller. Please, be careful.

19 MS. SYKES: My name is Tamara Sykes and
20 I'm a resident of Albemarle County and I'm speaking as
21 a member of the People's Alliance for Clean Energy. It
22 is not unnatural for Dominion and its stockholders to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 be blind to the profitability of sustaining the natural
2 resources of Lake Anna and the York River Watershed,
3 it's flora and fauna.

4 It is the responsibility of Virginia
5 citizens to guard vigilantly these resources, which
6 once destroyed will be impossible to recreate. And it
7 is the responsibility of the Commonwealth's Department
8 of Environmental Quality, as public stewards of our
9 resources, to object to Dominion Power's request for
10 construction of these additional units.

11 The wet/dry cooling system will not
12 resolve the evaporation issues of the once-through
13 cooling system. Thus, lower water levels and high
14 temperatures of Lake Anna and the downstream watershed
15 will continue to be real problems affecting all the
16 organisms that depend upon these resources. Thank you
17 very much.

18 (Applause)

19 HEARING OFFICER MURPHY: And now, I'm
20 going to pull this microphone down. Mr. Louis Zeller,
21 Blue Ridge Environmental Defense League and then the
22 next speaker will be Christopher Paine. Mr. Zeller?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 10 minutes, please, sir. Be careful of the wires.

2 MR. ZELLER: Thank you, Mr. Murphy. My
3 name is Lou Zeller and I'm on the staff of the Blue
4 Ridge Environmental Defense League. I appreciate the
5 opportunity to comment tonight on bringing the Blue
6 Ridge's comments on behalf of our organization, which
7 is organized in the State of Virginia as well as North
8 Carolina and South Carolina and Tennessee.

9 In November, the Department of
10 Environmental Quality rightly stayed its review of the
11 consistency determination to allow Dominion to present
12 a revised approach to the cooling of the third nuclear
13 reactor. However, DEQ to Dominion stated Dominion's
14 announcement of a revised approach to cooling the
15 proposed third nuclear power plant at North Anna did
16 not include the detailed analysis needed to implement
17 the approach.

18 We understand this detailed information is
19 currently being developed. However, the plant
20 parameter envelope detailed by the July 2006 supplement
21 to the Draft Environmental Impact Statement lists seven
22 possible nuclear reactors design. Five of these are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 light-water reactors, two are gas-cooled. The
2 Supplemental Draft EIS indicates where the plant would
3 be located, but the plant parameter envelope review for
4 the reactors themselves is based on educated guesswork,
5 because Dominion, apparently, cannot provide the
6 Nuclear Regulatory Commission with the necessary data.

7 The Environmental Standard Review Plan,
8 that is NUREG-1555, Volume 1, and other guidance are
9 supposed to assist the Nuclear Regulatory Commission
10 staff to perform a thorough, consistent and disciplined
11 review of Early Site Permit applications. The
12 Supplement Draft EIS notes that there is "missing
13 information" in Dominion's submission, which undermines
14 the Nuclear Regulatory Commission's ability to perform
15 an independent assessment.

16 I have included the relevant citation from
17 the Supplemental Draft EIS in my written remarks, in
18 which case it ends up saying that "The NRC staff use
19 its experience and judgment to adapt the review
20 guidance and develop assumptions necessary to evaluate
21 impacts to certain environmental resources to account
22 for the missing information." That's just a part of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 the citation.

2 "Supplement Draft EIS continues because
3 the Dominion plant parameter envelope values do not
4 reflect a specific design. They were not reviewed by
5 the NRC staff or correctness."

6 In this case, the standard which the
7 Nuclear Regulatory Commission employed in its
8 environmental review was the plant parameter envelope
9 values were not unreasonable. This not unreasonable
10 standard is not supportable, in my opinion, and is not
11 acceptable. DEQ cannot proceed with the consistency
12 determination on this basis alone.

13 Further, in the supplemental draft,
14 Nuclear Regulatory Commission anticipates an as yet
15 unsubmitted combined operating license before
16 addressing whether actual plant design will fall within
17 the envelope. In other words, the Nuclear Regulatory
18 Commission has left the plant parameter envelope
19 unsealed.

20 The ESP is the NRC's official
21 determination that two or more reactors can be built
22 and operated at Lake Anna without undue environmental

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 impacts. Consequently, DEQ's assessment of consistency
2 with the Coastal Zone Management Act and Coastal
3 Resources Management Program must include the potential
4 impacts on coastal resources for both construction and
5 operation of two or more actual reactors, not virtual
6 reactors, based on guesswork.

7 I have done some additional research over
8 the last month or so and I went back to a detailed
9 statement prepared by the Atomic Energy Commission in
10 1970, a statement on environmental considerations by
11 the Division of Reactor Licensing regarding the North
12 Anna Power Station Units 1 and 2. This is information
13 provided, of course, by VEPCO.

14 Page 20 of the report prepared by the AEC
15 says "The applicant stated," the applicant would be
16 VEPCO, "that the inundation of 13,000 acres of
17 reservoir and treatment lagoon will result in loss of
18 feeding grounds for wild game and that some amount of
19 migration can be expected with consequent short-term
20 adverse effects on game population and breeding. This
21 was not a sterile stream."

22 It continues later on "VEPCO will replace

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 the loss of natural game with an environment well-
2 suited for the propagation of fish and waterfowl."
3 Also, and I'm reading from the Atomic Energy
4 Commission, "VEPCO's commitment to maintain a minimum
5 stream flow of 40 cubic feet per second and its
6 willingness to increase this minimum to 60 cubic feet
7 per second should this higher value be agreeable to
8 both upstream and downstream interests, will minimize
9 the adverse effects from saltwater intrusion from
10 Pamunkey River."

11 We oppose the granting of the Early Site
12 Permit plainly based on this and other information
13 which we have submitted to the Nuclear Regulatory
14 Commission, but we also cannot see how the State of
15 Virginia can move forward unless further information is
16 provided.

17 One final note I feel compelled to make.
18 Last night on this stage there were comments leveled at
19 me personally, which amounted to liable and slander.
20 The individual who delivered those remarks has been
21 wrong before about our information and he is wrong
22 again. The Blue Ridge Environmental Defense League

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 will respond to him and his organizations that he
2 represents at the proper time. Thank you, Mr. Murphy.

3 (Applause)

4 HEARING OFFICER MURPHY: Our next speaker
5 then is Mr. Christopher Paine, Natural Resource Defense
6 Council, followed by Morgan Butler. Mr. Paine?

7 MR. PAINE: Thanks. My name is
8 Christopher Paine with the Natural Resources Defense
9 Council. My office is based in Washington, D.C.

10 PARTICIPANT: Can't hear you.

11 MR. PAINE: My office is based in
12 Washington, D.C., but I live in Charlottesville. I
13 just want to remind people about why we're here. I
14 don't believe that Dominion Power is actually seriously
15 interested in building this reactor any time soon. And
16 the reason I say that is because the economics of
17 nuclear power are so poor.

18 Now, a little over a year ago the Chairman
19 of Dominion Power, Tom Capps, was asked by the New York
20 Times about their plans, why they were applying for an
21 Early Site Permit, and he responded we aren't going to
22 build a nuclear power plant any time soon. And he

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 continued Standard & Poors and Moodys, those are the
2 two bond rating agencies for corporate America.
3 Standard and Poors and Moodys would have a heart attack
4 said Mr. Capps and my chief financial officer would
5 too, if he elected to build a nuclear power plant.

6 I happen to agree with him. So there is
7 sort of a real question why are we here? I think
8 Dominion's strategy is like some of the other nuclear
9 generating companies is to bank these permits and to
10 have, in a sense, a marketable asset and to put all of
11 us through this public process of evaluating these
12 plans. But there is no commitment in return for that
13 \$8 to \$10 million they got from the Federal Government
14 to process this permit. There is no commitment on
15 Dominion's part to actually build the plant. They may
16 or may not.

17 And the reason that we are possibly more
18 interested now than we were a year ago in this whole
19 subject is because in the interim since Mr. Capps made
20 his statement, the Congress has passed \$10 billion of
21 your money, taxpayer money in subsidies to build the
22 next generation of plants, the next six plants, \$10

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 billion in subsidies. So the previous speaker, the
2 first speaker or the second speaker who said that
3 nuclear power is an economic and cheap source of
4 electricity, I'm afraid is just simply misinformed.

5 It's currently the most expensive source
6 of electricity. The marginal cost, that is the cost of
7 an additional kilowatt from an existing plant is highly
8 competitive and that's why the current units at North
9 Anna are doing very well. But the cost of a new
10 nuclear power plant is not competitive with any other
11 resource out there. And that is why it requires \$10
12 billion of your tax money to get one of these plants up
13 and running.

14 Now, Virginia if it had its wits about it,
15 the State of Virginia would have a requirement on
16 Dominion and all the other power producers in the state
17 that they add electricity to the grid based on the
18 least cost available. And the least cost available is
19 efficiency. And I have never in all my years in living
20 in Virginia been approached by a Dominion or a VEPCO
21 representative saying let us install compact
22 florescents in your house, let us install LEDs, let's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 put a co-generation system in your business.

2 There is an enormous amount of power to be
3 had at prices dramatically cheaper. We're talking two-
4 thirds less expensive than the price of power from a
5 new nuclear power plant. Just the comparison, a new
6 nuclear power plant today is about 9.7 cents per
7 kilowatt hour, assuming an 85 percent capacity factor.

8 Recent utility and use efficiency programs in
9 California have been adding power to the grid at 2.5
10 cents to 3 cents per kilowatt hour.

11 So nuclear is literally three times as
12 expensive as efficiency. So the first thing, I'm not
13 actually an opponent of nuclear power, but I think the
14 rational thing for the state to do is to develop
15 programs to mind the so-called megawatts that exist in
16 the current grid. The tremendous amount of additional
17 energy services we can draw out of our existing grid by
18 just being more efficient in the way we use power. And
19 particularly with the addition of the invention
20 recently of light-emitting diodes for commercial
21 lighting.

22 Lighting is typically 35 percent of total

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 electricity demand and you can reduce your electrical
2 bill by 50 percent, your lighting bill by 50 percent by
3 using light-emitting diodes. There is enormous
4 reservoir within this state just to make energy
5 efficiency improvements. Then we should look at wind
6 power and gas-fired co-generation or waste heat co-
7 generation. All those are sources that can be added to
8 the grid more cheaply than nuclear.

9 The final point I want to make is that
10 adding another reactor and possibly a fourth reactor to
11 the same site that depends on a source like the lake,
12 like Lake Anna, that can be drained quickly by the
13 destruction of the dam, it seems to me creates a
14 vulnerability in Virginia's power structure that we
15 ought not to pursue. That there is probably a safer
16 and more stable and more secure way to bring power to
17 Virginians than building another two units at Lake
18 Anna.

19 And I endorse the environmental concerns.

20 If you are going to build a reactor, clearly, it has
21 to be the dry-cooling tower route. If you can do it
22 for the fourth unit, why not do it for the third unit

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 and just dispense with a lot of these concerns. But
2 there are bigger, I think, concerns that have to be
3 addressed having to do with the vulnerability of our
4 overall power system. Thank you.

5 (Applause)

6 HEARING OFFICER MURPHY: It has been
7 pointed out to me and I am remiss in not bringing it up
8 sooner that we really are here tonight to get comments
9 and concerns aired, but we want to disagree in a civil
10 way, if you don't agree with the previous speaker, and
11 not have anything be personal. We're not going to be
12 able to let that occur tonight and I can sympathize
13 with the fact that it's an emotional issue, it's very
14 complex, but let's, please, be civil with each other.
15 That's a much more productive meeting and we'll be able
16 to leave sooner.

17 All right. I also want to ask someone
18 from my staff to, please, come down. I cannot read one
19 of the names and I want to ask about that before I
20 butcher that. But our next speaker is Morgan Butler
21 with the Southern Environmental Law Center and the last
22 group that I have identified, I'm probably going to get

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 this name wrong as well, and I apologize ahead of time,
2 is Paxus Calta, if I'm even close. So first, Mr.
3 Butler, just a minute. Mr. Butler with Southern
4 Environmental Law Center, please.

5 MR. BUTLER: Good evening. My name is
6 Morgan Butler and I'm an attorney with the Southern
7 Environmental Law Center, a nonprofit organization that
8 works on a range of environmental issues in six states
9 and is headquartered in Charlottesville. The first
10 thing I would like to do tonight is just thank DEQ not
11 only for the opportunity to speak, but also for the
12 hard work and effort that a lot of the officials have
13 been putting in on this since Dominion first put this
14 application in a number of years ago. And I would like
15 to give particular thanks to Ellie Irons, Charles Ellis
16 and Joe Hassell.

17 SELC submitted a connote letter to DEQ
18 last October regarding the Federal Consistency
19 Certification for Unit 3 when a once-through cooling
20 system was being proposed for that reactor. In that
21 letter, we voiced concerns about the amount of lake
22 water evaporation that the cooling system would have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 induced as well as potential impacts from the
2 corresponding reduction to flow rates in the North Anna
3 and Pamunkey Rivers.

4 Citing DEQ statements, we know that the
5 Lake Anna Watershed is relatively small in size, so
6 that even a slight increase in consumptive use of water
7 could have a significant downstream impact. Reductions
8 in water releases to the North Anna River could
9 adversely impact the state's management of its coastal
10 fisheries. Lower downstream flows could also impact
11 recreational uses of the North Anna and Pamunkey Rivers
12 as recently noted by the Department of Conservation and
13 Recreation.

14 Finally, because of the number of counties
15 currently considering the North Anna and Pamunkey
16 Rivers as sources for drinking water, putting
17 additional strain on these rivers undermines the
18 Commonwealth's policy goal of avoiding coastal resource
19 use conflicts. Since we submitted that letter,
20 Dominion has, of course, revised its proposal, so that
21 Unit 3 would not use enclosed cycle cooling systems.

22 While laudable in some respects, this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 proposal seems to offer only a slight improvement in
2 terms of reducing lake water evaporation, so that many
3 of the concerns we expressed in our initial comments
4 regarding downstream flow rates remain. Indeed, while
5 Dominion's analysis finds that flows from the North
6 Anna Dam will be the absolute minimum level of 20 cubic
7 feet per second, about 7.3 percent of the time, the
8 NRC's analysis in the Supplemental DEIS puts that
9 percentage of time at 11. This is just slightly less
10 than what the percentage of time would have been with
11 the once-through cooling system.

12 Both DWR, Division of Water Resources, and
13 the Department of Game and Inland Fisheries have asked
14 that certain requirements be included into Dominion's
15 consistency certification if they are recommending that
16 it be issued. However, because these agencies'
17 findings are based on Dominion's analysis, it might be
18 advisable for these agencies to reevaluate the
19 recommendations and limit the information presented in
20 the Supplemental DIS.

21 If these agencies and DEQ ultimately
22 decide that their recommended conditions are sufficient

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 to protect our coastal resources, I would ask that DEQ
2 issue an objection rather than a conditional
3 concurrence that they continue to maintain that
4 objection until Dominion affirmatively and
5 unquestionably incorporates those recommendations into
6 its project design.

7 By issuing only a conditional concurrence,
8 those important conditions almost certainly will be
9 lost. Thank you.

10 (Applause)

11 HEARING OFFICER MURPHY: Again, I
12 apologize if I get this name wrong. It's Paxus Calta,
13 Nuclear Information Research Service, followed by
14 Melissa Kemp with Public Services.

15 MR. CALTA: Okay. I got lucky.

16 HEARING OFFICER MURPHY: Please, be
17 careful of the cords.

18 MR. CALTA: Well, my name is Paxus Calta
19 and I work with the Nuclear Information Research
20 Service in Washington, D.C., which is an umbrella
21 organization that represents about 300 to 400 grass
22 roots groups that are trying to stop nuclear power

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 plants in their area.

2 I'm here to say this evening that we need
3 the DEQ. The DEQ is the last independent review of the
4 proposed expansion of reactors at the North Anna site.

5 The Nuclear Regulatory Commission has lost our
6 confidence as an independent watch dog for our safety.

7 At a previous Nuclear Regulatory Commission public
8 hearing, held in this room, it was revealed that the
9 Nuclear Regulatory Commission had plagiarized
10 Dominion's public documents in writing its Environment
11 Impact Assessment.

12 Mr. Cruickshank from the Sierra Club
13 pointed out the Nuclear Regulatory Commission was not
14 planning on protecting reactors from weapons that are
15 commonly available over the counter in weapons bazaars.

16 What he didn't mention was that the GAO, the
17 Government Accounting Office, in March of this year
18 released a report saying that the Nuclear Regulatory
19 Commission's own staff had recommended an expansion of
20 security considerations at nuclear power plants.

21 And the nuclear industry itself had said
22 not that this is a bad idea, because these threats

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 didn't exist, it said this was too expensive and we
2 don't want to protect against rocket propelled launcher
3 -- grenade launchers and 50 caliber rifles which can be
4 purchased over the counter. But we're not allowed to
5 talk about terrorism in this process. Terrorism is too
6 speculative we are told, and so the problem
7 conveniently vanishes.

8 What we are allowed to talk about is
9 water. You have heard testimony this evening that the
10 current reactor is in violation of thermal regulations.

11 The DEQ should investigate these claims. Are there
12 greater than 100 degree temperatures at the lake? Are
13 these legal?

14 Dominion needs to be commended for looking
15 at ways to reduce impacts on water. From our
16 perspective this is just the beginning of the
17 conversation. Like many people in this room, I'm a
18 shareholder of Dominion Resources. I have been to the
19 last three shareholder meetings and I have had
20 conversations with the president and the Chairman of
21 the Board about North Anna. And every year I ask are
22 you going to build reactors at North Anna?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 And for the first two, I was told quite
2 clearly no. And the last time I went I said are you
3 going to build reactors at North Anna now that \$10 to
4 \$14 billion worth of federal subsidies have been passed
5 by the Federal Energy Bill for the construction of new
6 nuclear power plants? And Tom Capps, who is a real
7 straight shooter, said it still doesn't make economic
8 sense. And I said when will it make economic sense?
9 And he said a few things.

10 But ultimately what he said was it will
11 make economic sense when there is a carbon tax in the
12 United States. Now, if you talk to anybody who watches
13 politics in Washington and you ask them how soon there
14 might be a carbon tax in the United States, they will
15 tell you that is a very long time from now.

16 So the reason that this is relevant is our
17 request to the DEQ is you have got a lot of time.
18 There is no hurry here. We're not building nuclear
19 plants any time soon, according to the senior
20 management of Dominion Resources. Therefore, since
21 there is a lot of disagreement in this room about how
22 the water is going to be affected, you should spend

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 plenty of time figuring out who is on top of the water
2 situation. Thank you for your time.

3 (Applause)

4 HEARING OFFICER MURPHY: The next speaker
5 is Melissa Kemp with Public Citizen followed by Kerry
6 Basehore. Please, be careful.

7 MS. KEMP: Okay. Thank you. Hi, my name
8 is Melissa Kemp and I'm speaking here on behalf of
9 Public Citizen. I'm an organizer for them throughout
10 the southeast. I also do a lot of research on both
11 nuclear power and on new available technologies. I
12 graduated from Princeton in 2002.

13 I just want to say first off we
14 appreciate, really appreciate DEQ holding this hearing.

15 A lot of people are really interested in a side bar
16 where we could ask a lot of questions and make some
17 comments and so I'm really happy about this
18 opportunity.

19 We're here to talk about the consistency
20 of new reactors with the Coastal Zone Management Act
21 and we're here particularly to talk about the hybrid
22 cooling power system. I just want to say first off the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 bat that we have concerns with any new -- any
2 significant increase of operation from new reactors at
3 Lake Anna. So it's really about -- what we're talking
4 about today about the difference in cooling systems is
5 important.

6 But we're really concerned about any
7 increase in operation from the lake. I have seen
8 statements from a number of -- numerous state agencies
9 including DEQ expressing concern that the present
10 situation and stressed local original water resources.

11 So I just wanted to say that off the bat. Obviously,
12 you know, that operation is kind of a worry that
13 doesn't immediately relate to the effects that we are
14 talking about.

15 And what we are talking about is decrease
16 lake loads, which means impacts on recreation, like
17 swimming, boating, fishing. We're talking about lower
18 flows downstream, which have huge things like fishery
19 impacts, drinking water impacts, those talking about
20 things like kayaking and canoeing downstream.

21 You know, I was talking to someone
22 yesterday and we had a question about operation and she

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 said well, you know, isn't it true that you evaporate
2 water and that becomes clouds or it just falls back as
3 rain, so it's a cycle. So why are we so concerned
4 about evaporation? And I think that's important to
5 kind of comment about it.

6 I think what needs to be said is yes, we
7 do evaporate water into the air. Yes, it will rain
8 back. But what happens is water moves on with the
9 watershed. When you evaporate water, it often doesn't
10 stay in the watershed. And also when it does and it
11 falls back to there, they often fall back into a place
12 that can be, you know, into the watershed. It falls on
13 concrete, asphalt, all sorts of man-made things. So I
14 just want to make that clear. That's why operation is
15 a concern.

16 So moving on to the hybrid cooling tower
17 design. You know it does reduce their one path,
18 because that's our impression, and that's a good thing
19 and we can now -- Dominion is doing something about
20 that. But obviously, there is still this huge problem
21 with the hot side of the lake and that's what, you
22 know, a lot of people yesterday, yesterday evening were

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 talking about. I mean 104 degrees temperature, I mean,
2 that's what Harry Ruth had said that he had found
3 research that said that that was, you know, actually
4 dangerous or deadly to human health.

5 And for the part of the lake for no other
6 good reason to be private property and to be not
7 relegated at all in terms of temperature is just, I
8 think -- I would ask the Department of Environmental
9 Quality to really look into that and to resolve those
10 concerns. Even if the thermal patch for future
11 reactors will be negative.

12 Moving on. The main problem we have with
13 the new cooling power design is the evaporation
14 impacts. The statement has been again and again from
15 NRC that this is really going to reduce the
16 evaporation. This is a good thing. But you know,
17 looking at that analysis, that isn't really clear. I
18 mean, that is less than clear. Looking at the rates
19 that are actually in the documents, we have things like
20 37.2 cubic feet per second for most of the year, their
21 efficiency or energy conservation mode.

22 But that is actually significantly higher

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 than the 26 cubic feet per second that was the once-
2 through cooling system. So for three-quarters of the
3 year, the operation actually is going to be 10 cubic
4 feet per second more. Now, what they say is there is a
5 maximum water evaporation mode.

6 So in drought times, we have this, you
7 know, drought point system that kicks on. The maximum
8 rate through that is 25.7, which is about the same as
9 the once-through cooling system. Now, there is this
10 one question about, you know, NRC concludes that yes,
11 those are the maximum values, but really when we
12 operate this thing, it's going to be 19 to 23 cubic
13 feet per second. So lower than the once-through
14 system. But they made no clearer, except from what I
15 just read to you, to that conclusion.

16 And so I would really ask that you take a
17 look at that and kind of explain how we are getting
18 from equal or higher evaporation rates with the new
19 system to lower evaporation rates. Not significantly
20 lower. There still can be serious problems if we have
21 climate change problems or, you know, summers continue
22 to get hotter. But I would really ask them to --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 demand an explanation of how we get from something
2 equally higher to something lower, because we couldn't
3 find it.

4 And, actually, the one explanation that
5 was given last night is that the dry cooling tower in
6 the summer would operate in the evenings at 100 percent
7 like it can't operate during the day at 100 percent.
8 It can only be like about a third if you have high
9 temperatures and high humidity, but at the evenings
10 they are saying it would run 100 percent, and so I
11 would ask you to look into that, because that does not
12 really sound reasonable from a scientific point of
13 view.

14 One more thing about the proposed cooling
15 tower. I would ask DEQ to investigate like a lot of
16 the state agency letters to the Department of
17 Environmental Quality. They, as someone mentioned
18 earlier, refer to the frequency of 20 cubic feet per
19 second downstream flows. Well, how often are we going
20 to have this minimal trickle in the North Anna River?

21 And Dominion's analysis is that increased
22 from 5 percent to 7 percent and that is what all the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 state agencies write in their letters. That's what
2 they say. You know, it's only a 2 percent increase.
3 But in the Supplemental DEIS we talked about last
4 night, NRC's analysis, which is side-by-side with
5 Dominion's, about four or five times as long, maybe
6 more, actually concludes that it will be a 5 to 11
7 percent increase that someone mentioned awhile ago,
8 which is a lot more.

9 Yet, in the Supplemental DEIS there is no
10 explanation for like how these two models are -- you
11 know, how they -- there is no explanation for how they
12 disagree with each other and why and then what is the
13 conclusion out of that. So we would really ask the DEQ
14 to look into that and I think that is something really
15 important and the state agencies that use Dominion's
16 numbers, if those are incorrect, they should be advised
17 of that and perhaps they would like to resubmit their
18 comments or resubmit their letters.

19 So in concluding all these problems with
20 the proposed hydro-cooling tower, we would strongly
21 recommend that DEQ recommend or DEQ deny the
22 certification and recommend a dry cooling tower for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Unit 3. And last night, you know, we had kind of a
2 comment early on in the evening that I think when NRC
3 was showing slides that they had considered a dry
4 cooling tower, but they are expensive and inefficient.

5 And I think the exact quote was that the
6 inefficiency would be 8 to 11 percent more inefficient
7 to use a dry cooling tower. And I kind of just wanted
8 to take issue with that the way it was presented. I
9 mean, first of all, it's not inefficient. Inefficiency
10 would be two processes with the same end and one, you
11 know, uses less energy than the other one.

12 We're talking about two processes with
13 different ends. You know, one saves more water than
14 the other. What they meant by inefficiency was more
15 energy used, more electricity used. So the reactor may
16 use about 10 percent of the reactor's output to run a
17 dry cooling system.

18 So the question then, well, okay, you save
19 water so you get something for the extra electricity
20 you're using. So the question really is then, you
21 know, how much is our water worth? How much will it
22 cost Dominion to do this? And the impression I have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 always been given is that it will cost a lot of money,
2 a burden. You know, it's unreasonable. They are doing
3 something. To ask them to do what is completely right
4 and would eliminate all these impacts is too much.
5 It's too expensive.

6 But, you know, actually when you look into
7 it a bit more, the cost of -- the additional cost would
8 be about 2 cents per kilowatt hour, which I had planned
9 to do a calculation now depending on how much water we
10 save so we could actually have a price per, you know,
11 liter or gallon of our water, but that's not a whole
12 lot of money.

13 The fixed capital costs for running the
14 reactor remain the same, so really it's just the fuel
15 costs which typically uranium presently are pretty
16 inexpensive. So talking with very technical people
17 about this, they said, you know, it was ridiculous to
18 think that it was a burden, that it was that much more
19 expensive to do this. And plus, you know, they are
20 going to build a whole 2.5 billion or more per plant
21 and they are quibbling about, you know, X million
22 dollars to do this dry cleaning tower which would make

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 everyone's concerns in this room go away.

2 So we would again just advocate that they
3 -- you know, the DEQ deny the certification and
4 recommend a dry cooling tower instead. It's also --
5 just one more thing. It's also interesting that when
6 they submitted this revised cooling tower thing, they
7 also asked for an upgrade, so that means they are
8 generating more electricity. So it will be interesting
9 to see how the upgrade compares to the energy use
10 around the dry cooling tower and see how those two
11 figures compare. So just two more things I wanted to
12 mention.

13 HEARING OFFICER MURPHY: One more minute.

14 MS. KEMP: Yes, okay. The last thing I
15 will mention is just the continuing waste and security
16 issues, and I realize DEQ is not the forum for that,
17 but I would just like to say that when it comes down to
18 it, NRC ignoring these issues, it will end up affecting
19 the very resources that DEQ is charged to protect.

20 And so NRC has completely ignored waste,
21 completely ignored security and they said they have the
22 confidence that they are taking care of that. And I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 would just like to, you know, mention that it will be
2 DEQ whose resources that they are meaning to protect
3 will be affected.

4 And just one last thing in talking about
5 these burdens and these problems, it is said often
6 enough that Virginia does have another alternative,
7 that renewable technologies can meet Virginia's needs.

8 I would recommend everyone take a look at a study
9 about coal at the Virginia Center for Coal and Energy
10 Research 2005 and National Renewable Energy Laboratory
11 did a great analysis for solar, wind, geothermal heat
12 pumps for Virginia.

13 And basically, you know, these renewable
14 resources can completely meet Virginia's electricity
15 needs in the next two to three decades. And I would
16 just like to make -- you know, people ought to keep
17 that in mind like we have a choice. It's not coal and
18 climate change or nuclear power. It's coal, climate
19 change, nuclear power, radioactive waste and all those
20 other water pumps or, you know, renewable technologies
21 that are actually clean and actually sustainable.

22 And thank you very much for your time and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 we will submit full written comments.

2 (Applause)

3 HEARING OFFICER MURPHY: From what I have
4 been handed, that was the last representative of a
5 group. The next speakers, we ask that you would keep
6 your comments to three to five minute range, please.
7 We still have close to 30 folks that have registered to
8 speak this evening. I will call up the next three in
9 order so you can be prepared.

10 The first would be Michael Ireland, Burton
11 Marshall and then Richard Ball, please. So Mr. Michael
12 Ireland? Thank you for your patience.

13 MR. IRELAND: Okay. Hello. My name is
14 Mike Ireland. I am a resident of Louisa County. I
15 live out on the lake. I am a retiree from northern
16 Virginia, lived here for about six years now, love the
17 county, love the people, love the lake.

18 I do want to first of all endorse and
19 agree with everything that Harry Ruth has said.

20 PARTICIPANT: We can't hear you.

21 MR. IRELAND: Secondly, I provided some
22 formal written comments earlier by email which I will

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 hold to, and I just want to make a couple of brief
2 comments adjunctive to those.

3 First of all, let me ask quick, there's a
4 lot of people here tonight. About how many here work
5 for Dominion, are married to someone working for
6 Dominion or contractors for Dominion? Could I see some
7 hands so I know who is here? Okay. Wow.

8 Well, I got to tell you, if you're a local
9 guy and you got to come up here before this Commission
10 and say something that isn't in Dominion's favor, it's
11 a whole lot -- you feel a whole lot like a little mouse
12 in a hole that is trying to be encouraged to come out
13 of the hole by a ferociously hungry corporate cat and
14 discuss the evening's dinner menu. Now, I have friends
15 at Dominion.

16 PARTICIPANT: Mike, we cannot hear you.

17 MR. IRELAND: I have friends at Dominion.
18 Do you want me to repeat the joke? And the point is
19 this. I'm really glad that Dominion brings jobs and
20 pays taxes. All large corporations pay taxes to the
21 counties they are in because it's the law not because
22 they like to or they want to or they are just being

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 generous.

2 All big corporations that work in counties
3 hire people and pay wages that support the county.
4 Now, they don't do that because they just want to give
5 a lot of money to the county and the people. They do
6 it because they are going to use the people to generate
7 massive corporate profits. Okay.

8 Now, given that perspective on things, it
9 would be nice to believe that one's board of
10 supervisors, when the idea of an expansion comes up,
11 would see that they had a two-edged sword that they had
12 to deal with. On the one hand, they got a corporate
13 client that they need to be fair to and that they want
14 to encourage the growth in their taxes and all that,
15 but on the other hand they have a lot of people who
16 have invested their lives, their property and
17 everything else out there on that lake.

18 They need somebody to defend their
19 interest and talk to the big corporate guy and say,
20 whoa, yes, you built the lake way back when. That was
21 then. This is now. The two million people have come.
22 The houses have been built. The docks are out there

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 on the water.

2 So before we talk about anything that
3 might involve cooking the fish on the hot side,
4 covering up and putting the boat houses and the ramps
5 and everything on the cold side of dropping the water
6 level to the point that nobody can even get a jetski in
7 because the droughts are sustained or putting up a
8 tower that generates so much noise that you're going to
9 hear it half a mile away loudly.

10 Now, those things are not right and you
11 would think that a board supervisor would have
12 addressed them. But no, those people out there at the
13 lake, you know, they are just the northern Virginia
14 bunch. If they don't like it, they shouldn't have
15 bought out there in the first place. By God, Dominion
16 built that lake and they can do whatever they want to.

17 If those folks don't like it, they can just leave.

18 Now, am I imaging this or did anybody else
19 see this in the central Virginia over the past six
20 months? Hm, okay. Now, I don't know why Dominion
21 started out in this county with its neighbors and in
22 some cases friends, started out like a 25 ton gorilla

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 kicking the living hell out of anybody who just might
2 not like what they are going to do. That was not
3 smart.

4 But what has happened is in the ensuing
5 months, as this process has moved to other counties
6 that don't get the tax dollar, other counties whose
7 board of supervisors aren't necessarily so hot that
8 have 7,000 new people running around, because they are
9 over here and not over there, all of a sudden the
10 arguments, the impacts have like lumps in mashed
11 potatoes, they have just kind of got smooth.

12 You know, a real good example. No, now
13 we're not going to have any increased water level. No,
14 now we're not going to have any decreased water level.

15 No, now we're going not to have any increase in the
16 temperature. Oh, you know that cooling tower? It is
17 going to generate 65 decibels at the tower. Ew, Louisa
18 has got an ordinance that says you can't go above 55.
19 It just so happens by the time that sound gets to the
20 end of Dominion's property, it's going to be 50
21 decibels. Now, that is good.

22 My point simply is this. I worked a long

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 time with a lot of numbers and with people that worked
2 a lot of numbers. You can make numbers do whatever you
3 want them to, promise. I don't know that there is
4 anything wrong with the numbers. I do wish that the
5 whole thing had been handled differently from the
6 onset, but it wasn't.

7 So I guess what I'm saying is all I want
8 in the process, I'm not anti-nuclear. I'm not crazy
9 about 30 metric tons of radioactive material sitting
10 out there in casks that God and everybody else knows
11 are going to leak in about 15 to 20 years, but we'll
12 wait until then to discuss it.

13 But for right now, I am concerned about
14 the noise. I am concerned about the quality of life of
15 the people that are here, the people that came and
16 bought into this. Now, all I want in this process is
17 an honest broker. I want somebody that is qualified,
18 professionally qualified, that is absolutely
19 independent, completely disinterested, to take all of
20 the numbers, all of the assumptions, all of the
21 estimates on how loud this Turkey is going to be.
22 What's it really going to do to the water?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 What's the assumption based on the water?
2 Is it new or are we looking at what is going to happen
3 in the global warming? And I want them to analyze
4 everything that has been done and certify that it's not
5 going to affect the water level, it's not going to
6 affect the water temperature, it isn't going to create
7 a noise problem or anything else. And then when it's
8 impartial and it's objective, I think we can all relax
9 and be friends again. Thank you.

10 (Applause)

11 HEARING OFFICER MURPHY: Thank you, Mr.
12 Ireland. Burton Marshall, then Richard Ball and then
13 William Murphey. I know I will get that name right,
14 and we'll talk about Mr. Murphey's time when he comes
15 up. Thank you, sir.

16 MR. MARSHALL: Good evening. Members of
17 DEQ and other regulatory agencies, ladies and
18 gentlemen, my name is Burton Marshall. I am a
19 registered professional engineer in the State of
20 Virginia and I am a retired Virginia Power employee,
21 retired in 1995.

22 The reasons for speaking tonight are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 three. I have a very keen interest and concern for our
2 nation's and Virginia's power supply, and I believe
3 that there is a very critical need for reducing
4 dependence on foreign oil and gas supply.

5 (Applause)

6 MR. MARSHALL: I also have a familiarity
7 with the North Anna Power Station and Lake Anna. From
8 1985 to 1995, I was responsible for managing the Water
9 and Waste Environmental Programs for Dominion Virginia
10 Power. Included with those duties were the Fish and
11 Wildlife Terrestrial and Endangered Species, some of
12 those programs often referred to as bugs and bunnies.

13 The North Anna site was designed for four
14 units and with today's national focus on energy
15 independence and the current world situation, now seems
16 the appropriate time to explore feasibility of adding
17 the two units to North Anna.

18 While I was employed at Dominion, my staff
19 collected the samples and prepared the documentation to
20 obtain the 316(a) variance for the heated discharge
21 from Units 1 and 2. With Dominion's proposal to use
22 cooling towers for 3 and 4, additional heat to the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 waters is minimized and of small impact. Regarding the
2 Coastal Zone Management Program, the existing NU units
3 would be outside of the Coastal Zone designated area.
4 However, Spotsylvania County is in the Coastal Zone.

5 Anticipated activities associated with the
6 Early Site Permit seemed to be mainly construction of
7 infrastructure, that is the land disturbing activities
8 that could be controlled by best management practices.

9 Appropriate local and state permits would need to be
10 acquired for those activities.

11 The EIS, the Draft EIS, did not indicate
12 any activities under the Early Site Permit that could
13 not be redressed. Since the ESP is not approvable to
14 construct nor operate new units and since Dominion has
15 provided a very detailed certification of consistency,
16 I urge the DEQ to concur that issuance of the ESP would
17 be consistent with Virginia's programs and enforcement
18 authority. Thank you very much.

19 (Applause)

20 HEARING OFFICER MURPHY: The next speaker
21 is Richard Ball and then William Murphey. Please, be
22 careful of the cords.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MR. BALL: Okay.

2 HEARING OFFICER MURPHY: I apologize for
3 that. Thank you.

4 MR. BALL: Thank you. We appreciate the
5 opportunity to present testimony. I am representing
6 the Virginia Chapter of the Sierra Club and I am the
7 Energy Issues Chair for the Virginia Chapter.

8 Just for your information, we previously
9 presented testimony on the new reactors to the Nuclear
10 Regulatory Commission, but not so far to the Department
11 of Environmental Quality. We appreciate the
12 Department's diligence in pursuing these issues,
13 especially the issue of water resource consumption and
14 downstream impacts and we have tended to generally
15 agree with your analysis of the previous Environmental
16 Impact Statement.

17 And so I'm going to focus, I'm going to
18 just summarize my remarks and I will focus on this
19 issue of the water consumption, but I did want you to
20 be aware that the Sierra Club Virginia Chapter has
21 taken a position opposing approval of additional
22 nuclear reactors at North Anna or certification of that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 site as suitable for new units, but I won't go into
2 those reasons. I will attach that to my testimony.

3 But one of the reasons does concern this
4 issue of water resources. And we feel that an
5 additional loss of lake water associated with either
6 once-through lake cooling or withdrawals for
7 evaporative cooling towers would seriously compromise
8 the ability to maintain lake levels within current
9 operating targets and will likely result in significant
10 decreases and releases of water to downstream aquatic
11 habitats, especially in periods of low flow and drought
12 conditions.

13 And the proponents' analysis shows, as I
14 think has been mentioned previously, that the number of
15 occurrences of flows of 20 cubic foot per second would
16 increase from about 5 percent to 11 percent.

17 We generally agree with the position and
18 have stated so before with the Department of
19 Environmental Quality. You have said previously, your
20 Division has said, that you have commented in regard to
21 its concern for the adequacy of Lake Anna as a source
22 of cooling water for a third nuclear reactor and that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 these concerns remain. This was in 2005 before the
2 latest proposal.

3 So there are two questions, and the one is
4 with the latest proposal and changes for cooling system
5 for Unit 3, have these really alleviated those
6 concerns? And the issue is complicated because the new
7 units, their actual consumption varies with atmospheric
8 conditions. According to the Supplemental EIS
9 statement, the average over a year might be only 8,700
10 gallon and put this in gallons per minute, and the
11 previous once-through option was about 11,700 gallons
12 per minute.

13 But it depends a lot on the condition and
14 the maximum condition that under this EC mode the
15 consumption of water would increase to 16,700 gallons
16 per minute, whereas even in the conserving MWC mode
17 under maximum conditions it would be about 11,548
18 gallons per minute, which is very close, only 1 percent
19 less than the once-through option.

20 So the situation is complicated and if you
21 were addressing the question, has the new proposal
22 improved the situation, it really depends in great

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 detail upon the juxtaposition of your low flow
2 conditions and your operating and your atmospheric
3 conditions in relationship to your downstream
4 resources. So you have to do fairly complicated
5 modeling to answer that question.

6 And in that regard, I would urge you to
7 consider that it becomes very important as to whether
8 the proponent and the NRC has committed to a certain
9 set of operating protocols to maintain certain
10 conditions, as to whether you can say whether this is
11 going to -- how much worse this option would be versus
12 the previous option.

13 But the really bottom line is not
14 comparing the previous option with the new option.
15 It's comparing it to the previous conditions that
16 existed before any new units are put online. And, as
17 another gentleman here has pointed out tonight, perhaps
18 we should also go back and compare it with the natural
19 conditions that existed before there were any nuclear
20 reactors at Lake Anna.

21 And in that regard, I think we still have
22 the problem, the question that was raised before, can

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Lake Anna really support any further reactors? We have
2 seen even in the real operating data that conditions
3 have fallen in the past, below 40 cubic feet per
4 second, quite frequently and we think this is maybe an
5 unacceptable ecological impact, and the new reactors
6 with any cooling water withdrawals can only make that
7 situation worse. So we think it's --

8 HEARING OFFICER MURPHY: One minute,
9 please, sir.

10 MR. BALL: Yes, okay, I will sum it up
11 then. So we would urge you to very carefully evaluate
12 these things because it isn't clear to us that it's
13 acceptable to have any new reactors at Lake Anna. We
14 do urge you to diligently pursue that analysis to
15 demonstrate that. Thank you.

16 HEARING OFFICER MURPHY: Yes, sir.

17 (Applause)

18 HEARING OFFICER MURPHY: It has been
19 pointed out to me that we failed to get Mr. William
20 Murphey signed up as representing the Lake Anna Civic
21 Association, if I have that correct, sir. And as such,
22 in such a large group with the interests, if you could

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 limit comments to 10 minutes, sir, for the group, we
2 would appreciate that and I apologize for our error.

3 Would you like to have the microphone down
4 there?

5 MR. MURPHEY: No.

6 HEARING OFFICER MURPHY: Okay.

7 MR. MURPHEY: Just was keeping out of your
8 way. That's all.

9 HEARING OFFICER MURPHY: I understand.
10 Please, be careful of the cables. I apologize for
11 that.

12 MR. MURPHEY: My name is Bill Murphey and
13 I represent the Lake Anna Civic Association which has
14 about 700 families living around the lake, but I also
15 represent the Windwood Coves Property Owners
16 Association which has about 250 families in our
17 community. They have both endorsed the remarks that I
18 am going to make.

19 Dominion Nuclear North Anna has been a
20 good, responsible neighbor over the years and although
21 in a group of our size there is always going to be
22 people with different opinions, on the whole we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 strongly favor proceeding with the third and fourth
2 nuclear North Anna units.

3 We believe, however, that there are some
4 correctable adverse effects and we request that these
5 adverse effects be corrected. We recognize that the
6 authority and the responsibility to correct these
7 effects is distributed between many agencies, between
8 the NRC, the Virginia DEQ, other Virginia State
9 agencies and Dominion Resources. We ask for the
10 cooperation between all of these agencies to try and
11 correct the effects.

12 First, the temperature. We request that
13 the water temperature at the end of the discharge canal
14 be limited to 104 degree fahrenheit. The reason for
15 this is there are people swimming there. Above 104
16 degrees can be life threatening. We do not want to see
17 an accident happen at that location.

18 Lake level. There are many issues with
19 regard to the lake level. We request that simple,
20 obvious steps be taken to improve the management of the
21 water in the lake so that during times of low rainfall,
22 we can increase the level of the lake. In particular,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 we request that the release over the dam be changed to
2 5 cubic feet per second for lake levels below 250 feet.

3 These limitations have to be examined in
4 terms of the downstream users, but we encourage DEQ to
5 make measurements of the water inflows below the dam.
6 There are a number of streams that come in. The South
7 Anna River comes in and this will reduce the effects of
8 the decrease of the water over the dam.

9 In addition, we request that DEQ provide
10 and make public the for and against arguments relating
11 to the import of about 50 cubic feet per second of
12 water from either the James River or the Potomac River.

13 This water would be passed into the atmosphere in the
14 evaporative cooling process and, consequently, would
15 then come out as rain farther east from here. These
16 changes in management of the water in the lake would
17 reduce the stress on the lake due to the evaporative
18 losses.

19 The application of Virginia law. There
20 are a number of state regulations that relate to the
21 health, safety and welfare of the citizens. On the
22 warm side right now, many of the agencies are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 prohibited from applying these regulations. We request
2 that the state agencies be required to apply the health
3 and safety regulations to the cooling lagoons with
4 recognition that many of these regulations have no
5 effect on the power plant at all.

6 Evacuation. We request that the Virginia
7 Department of Transportation upgrade the roads around
8 the lake so that they are adequate for the evacuation
9 of the current and expected populations. Right now
10 there has been very little improvement around the lake.

11 In summary, the Lake Anna Civic
12 Association as a whole is strongly in favor of
13 proceeding with the third and fourth units and that we
14 request that these recommendations and requests be
15 implemented. Thank you.

16 HEARING OFFICER MURPHY: Thank you.

17 (Applause)

18 MR. MURPHEY: There is a written form in
19 there.

20 HEARING OFFICER MURPHY: Yes, sir. Thank
21 you. Thank you, Mr. Murphey. Again, I apologize that
22 we didn't pick up that you are representing the Lake

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Anna Civic Association. I have got a little bit of a
2 housekeeping item here. We have a Michael Stuart
3 registered twice, one of whom appears to have yielded
4 his time to someone else.

5 Is there a Michael Stuart that had
6 registered and did you intend to speak, sir?

7 MR. STUART: I did, yes.

8 HEARING OFFICER MURPHY: Okay. You're
9 next.

10 MR. STUART: Okay.

11 HEARING OFFICER MURPHY: Followed by
12 Delbert Horn. Please, be careful. Apparently, we have
13 -- you're like Mike Murphy. There's more than one.

14 MR. STUART: All right. Now, I am here
15 also representing a group, but I will limit my comments
16 to five minutes. So if you give me the --

17 HEARING OFFICER MURPHY: Yes, sir.

18 MR. STUART: -- signal at four, I will
19 wrap it up. I'm wearing two hats tonight. My name is
20 Michael Stuart. The first hat is that of Public
21 Information Officer of a group called the North
22 American Young Generation in Nuclear.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 For those of you who do not know who that
2 is, we are a national group, an international group in
3 North America of over 2,000 members representing many
4 fields of nuclear technologies, and we strongly believe
5 that nuclear energy is safe, clean and reliable. And
6 along with conservation and renewable energy, it's an
7 important part of a non-polluting energy mix. So it
8 probably comes as no surprise that we support
9 Dominion's bid to keep the option to build new nuclear
10 to meet the needs of Virginia.

11 I'm not just here to tell you I represent
12 a bunch of people. As a matter of fact, I have -- on
13 behalf of the NA-YGN I would like to present DEQ with
14 1,190 signatories of people who also agree that DEQ
15 should grant Dominion Coastal Zone certification.

16 HEARING OFFICER MURPHY: Okay. Thank you.

17 MR. STUART: Thank you. Okay. Now, for
18 my other hat. I would like to speak to you as a
19 citizen of the community because I do live in the
20 community and within the 10 mile EPZ.

21 My family and I work in the community and
22 we not only promote energy efficiency and conservation,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 but we live by example. When we built our home 10
2 years ago, we employed passive solar heating. We also
3 have great insulation and a geothermal heat pump. We
4 love it. Our actions reflect our words.

5 It's fascinating to follow the opposition
6 of expansion at North Anna and I had all along listed
7 things that they could have been saying, but they have
8 not a lot to do with DEQ and Coastal Zone Management
9 and the other things that this meeting is here for, so
10 I'm going to skip all over that.

11 But we can all agree that everybody wants
12 safe, clean and affordable electricity. We don't mind
13 the tax revenue and the associated benefits, but there
14 are a lot who don't want it in their backyard, but
15 these people forget that Lake Anna was a creek bed that
16 was virtually devoid of life before nuclear power came
17 along and put a lake there.

18 (Applause)

19 MR. STUART: Okay. Dominion bought the
20 land and built the lake specifically to support four
21 nuclear units.

22 (Applause)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MR. STUART: It has developed into a great
2 community. They forget that the flow rates of the
3 North Anna River varied from a barely trickling creek
4 to a flooded river before the dam regulated its flow.
5 With flow rates varying from 1 CFM to 1,000 CFM, the
6 smallmouth bass population wouldn't have a chance as it
7 does today.

8 They forget that the recreational lake
9 whose boat traffic roars all weekend would not even be
10 there if it weren't for nuclear power nor would their
11 lake front property and astronomical property values.
12 In fact, many of these people who are opposed to
13 expansion at North Anna would not even live here if it
14 wasn't for nuclear power.

15 Now, there are representatives of various
16 organizations here tonight that would judge the merits
17 of cooling towers based on the data from a document
18 from 1978. I'm not going to go into details about
19 that, but these old documents don't take into account
20 the advances in cooling tower designs over the last 30
21 years. Modern cooling towers are far more efficient
22 than those that were designed three decades ago.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Some will cite instantaneous evaporation
2 rates that I heard earlier and try to compare those to
3 average evaporation rates elsewhere in the document. I
4 point out that there are experts in attendance in this
5 very room that if someone has a question or allegation
6 that could easily be clarified by the experts in this
7 room, I would ask that DEQ either put the issue to rest
8 themselves or allow one of the experts in attendance to
9 speak to that issue. Thanks.

10 (Applause)

11 HEARING OFFICER MURPHY: Before the next
12 speaker, I had several people point out to me their
13 concerns about the room temperature tonight. I very
14 seldom wear a full suit and tie, but I'm glad I have my
15 jacket on tonight. I apologize. We have no control
16 over it.

17 Our next speaker is Delbert Horn and, Mr.
18 Horn, while we have been running the meeting this
19 evening, additional individuals have yielded their time
20 to you, so you have 10 minutes, sir, and if you can
21 keep your comments to that.

22 MR. HORN: Sure.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 HEARING OFFICER MURPHY: Thank you and,
2 please, be careful of the cables, sir.

3 MR. HORN: Thank you. I don't think I
4 will need that much time. Good evening. My name is
5 Delbert Horn. I am a Goochland County resident and a
6 Dominion employee.

7 The DEQ is tonight reviewing information
8 submitted by Dominion to determine if the project will
9 be consistent with the Coastal Zone Management Program.

10 These are my personal comments on how I feel the
11 project fits into the program.

12 This is a fairly narrow scope of review
13 considering that the ESP site is not even in the
14 Coastal Zone. The zone starts at the middle of the
15 lake and includes Spotsylvania County which is in the
16 Coastal Zone. So what follows under the Coastal Zone
17 Management Act? 10 things in all, but in the interest
18 of time I will focus on only two.

19 Fisheries Management was raised several
20 times tonight. Going from a once-through cooling
21 system to a wet/dry tower has virtually eliminated any
22 thermal impact on the lake. If this lake has less of a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 certain species of fish than other lakes, it is because
2 the fish in the lake just aren't matched to start with.

3 Striped bass like cool water and long spawning runs,
4 neither of which are a characteristic of Lake Anna.

5 These fish are trucked in every year by
6 the Virginia Department of Game and Inland Fisheries
7 for sport and they would have to be trucked in every
8 year with or without Units 3 or 4. Without the long
9 spawning runs that these fish require to reproduce,
10 they don't have a self-sustaining population. They are
11 an artificially supported species in the lake.

12 I just wanted to point that out. As far
13 as Fisheries Management, Unit 3 would have no impact on
14 that because they can't survive on their own anyway.
15 They are stocked every year.

16 When it comes to water withdrawal, this is
17 where a big contention is also. It is not just a
18 nuclear issue though. All base load thermal plants
19 with steam turbines require cooling water to condense
20 that steam back into water and go back through the
21 steam generation cycle. This is the same process for
22 coal, natural gas or nuclear.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 The difference is how do you extract the
2 heat from that steam to condense it back into water?
3 Do you use once-through cooling? Do you use wet
4 towers, dry towers or a combination? It's a tradeoff
5 and, as with anything in the physical world, you can't
6 get something for nothing.

7 Once-through is more thermally and
8 electrically efficient, but you add more heat to the
9 lake. Wet tower cooling doesn't add heat to the lake,
10 but you still have to make up the evaporation loss with
11 lake water. Because dry towers are less efficient
12 coolers, they would have to be larger, thus impacting
13 more land space and require more electrical power to
14 run.

15 What I find interesting is that the same
16 groups that advocate energy efficiency, instead of
17 building new nuclear are now demanding that Dominion
18 use the least efficient of these cooling options and go
19 with the dry towers. The argument of if dry cooling
20 would work for Unit 4, why not use it for Unit 3, goes
21 against your own principle of energy conservation.

22 There is a happy medium here. I feel the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 wet/dry tower hybrid balances the many different needs.

2 It allows the plant to conserve water in times of
3 drought allowing the plant to operate without consuming
4 water, but at the cost of operating less efficiently
5 for that time.

6 When lake levels are normal, it allows use
7 of wet/dry cooling which would get about 30 percent of
8 its heat transferred through the dry radiators portion
9 of the tower and 70 percent of its heat transfer
10 through the wet. The thermal impact to the lake is
11 negligible and water consumption is balanced by river
12 inflow and rainfall. Downstream flow is unchanged in
13 this case.

14 I want to summarize. There is no energy
15 source without some environmental impact. It is all a
16 complex balancing act, but I feel that these new units
17 strike the right balance. From what I can see in the
18 submitted information, I feel Dominion's certification
19 is consistent with the Coastal Zone Management Act.

20 I urge the Virginia Department of
21 Environmental Quality to thoroughly review the
22 information and find the certification consistent with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 the Coastal Zone Management Program. Thank you.

2 (Applause)

3 HEARING OFFICER MURPHY: Thank you, Mr.
4 Horn. The next speaker then is Steven Swarthet
5 followed with Kelly Taylor. Did I come close?

6 MR. SWARTHET: You came close.

7 HEARING OFFICER MURPHY: Okay. Please, be
8 careful of the cables. Thank you for your patience,
9 sir.

10 MR. SWARTHET: I will be brief. My name
11 is Steve Swarthet. I live in Louisa County. In fact,
12 I live down in Mineral.

13 Ladies and gentleman, through my company I
14 facilitate and teach root cause analysis or why
15 processes fail. I have previously worked at North Anna
16 Power Station for 14 years, but I left there in June of
17 '96. Since then I have worked as a consultant for 11
18 other nuclear stations, among them Main Yankee, Salem,
19 Kewaunee, Wolf Creek, Callaway and Turkey Point.

20 I have done no further business with
21 Dominion. I say this to establish some independence.
22 My point is in all of my travels, I have not run across

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 another nuclear station as well-run as North Anna. I
2 was once asked the difference between a top performing
3 business and a marginally performing business. My
4 answer was and still is the willingness to identify and
5 fix problems.

6 Many companies will deny that any problems
7 exist at their plants or, when forced to admit problems
8 exist, will apply some superficial fix and declare
9 victory. This seldom occurred at North Anna while I
10 was there and, based on their continued excellent
11 performance in both the economic and radiological
12 areas, I am confident that this happy state continues
13 to this day.

14 Now, you all have the information. I'm
15 not going to address that because you can read that a
16 whole lot better than I can. You have the expertise.
17 I just wanted to emphasize that in my travels over the
18 past 10 years, I have not come across a better run
19 power station than North Anna. And based on their
20 excellent record, I strongly support their request for
21 Units 3 and 4.

22 (Applause)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 HEARING OFFICER MURPHY: Thank you, sir.
2 The next speaker is Kelly Taylor followed by Lisa
3 Shell. Ms. Taylor, please, be careful of the cables.

4 MS. TAYLOR: Melissa Kemp was right and I
5 appreciate the information that she brought to light
6 through this evening. Not only is she right, but a lot
7 of the -- some of the information she presented was
8 agreed to by the NRC in their Supplemental Draft
9 Environmental Impact Statement where they considered
10 what the alternatives were to the wet/dry cooling
11 system that Dominion has proposed for Unit 3.

12 And if you look at it, it's probably
13 available on the NRC website. In Section 8.23, 8.2.3,
14 excuse me, they talk about how much energy would be
15 needed for a dry cooling tower if they used it for Unit
16 3 and it's about 150 megawatts, which agrees with the
17 numbers that Melissa Kemp was providing.

18 Now, when you start talking about how much
19 that is going to cost in the power that is produced,
20 you don't have to just consider the capital cost. You
21 also have to consider loss of productivity over the
22 life of that unit and if you're talking about a nuclear

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 unit that is going to be in service for 60 years,
2 you're talking about losing 150 megawatts out of that
3 unit for the 60 year life span of that product that the
4 company is talking about building and putting in.

5 You're talking about giving up 10 percent
6 of the power output that you can get from the nuclear
7 reactor out of that, and I agree with the people that
8 have spoken ahead of me that that doesn't seem to be a
9 very good stance to be taking for people that are
10 interested in conservation and the most efficient use
11 of your resources.

12 Now, in conjunction with that, before I
13 looked at the numbers it seemed to make sense to go
14 with a dry cooling tower for Unit 3. Calvert County,
15 Maryland has passed a tax break trying to invite
16 Constellation to site a nuclear unit in their county
17 and the tax break amounts to about \$300 million, which
18 is 50 percent more than Dominion has already agreed to
19 spend on the modified cooling tower system that they
20 are proposing if they build Unit 3.

21 If the county and the localities wanted a
22 dry cooling tower system, then why not offer to pay for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 it, provide the tax breaks that would be an incentive
2 for Dominion to put in the dry cooling tower over the
3 wet/dry cooling tower? If it were another \$200 million
4 and it were enough of our interest, we could basically
5 offer as a county to do the tax breaks to convert to
6 another dry system in order to cut down on the water
7 use, in order to cut down on the environmental impact.

8 But basically what you're saying is that
9 you want to use nuclear power to reduce the output of
10 this unit by 10 percent over the life span of it.
11 You're basically telling the utility that we only want
12 82 percent effective capacity factor out of this unit
13 that you're going to put in instead of the 92 percent
14 that is what the industry is accomplishing right now.

15 Now, it won't show up in the numbers that
16 they report every year because they will be using that
17 power to run a big turbine out on the grounds that they
18 are using to cool the unit. And that is still an
19 option if you want to discuss it with them. It's
20 probably not an option. It's probably not a realistic
21 option, but what are you trading off?

22 You're trading off the possibility of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 having power available for the people that need it for
2 the improvement in the -- not in the -- in the
3 lifestyle that you have available in order to use less
4 water out of the lake, protect the fish downstream,
5 protect the recreation from downstream.

6 You're talking about real hard value out
7 of the electricity that is available vice a lot of the
8 recreational uses that are available. And I think for
9 what is a small impact in the recreational uses, the
10 value of the electricity is more beneficial to the
11 community.

12 I object to Paxus Calta's implication that
13 the Virginia Department of Environmental Quality just
14 wait until everyone in this room can come to an
15 agreement over who is on top of the water situation. I
16 would submit that the Virginia Department of
17 Environmental Quality is who is charged with being on
18 top of the water situation and I entrust them to do the
19 right thing and to review all the information that is
20 available and come to the appropriate conclusion to
21 that effect.

22 I object to Harry Ruth and the Friends of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Lake Anna's charge of neglect on the part of the
2 Virginia Department of Environmental Quality that they
3 are not fulfilling their obligations that the
4 Environmental Protection Agency has charged them with
5 with regulating the surface waters in the State of
6 Virginia.

7 These are competent people. These are
8 scientists. These are very valuable civil servants
9 that do an incredible job for the citizens of Virginia
10 and I find it offensive that people would stand up here
11 in a meeting that they are hosting and find fault with
12 the job that they are doing for the state.

13 As for the environmental impact, if you
14 would like to see the Early Site Permit turned down,
15 then consider the other environmental impact of how
16 you're going to produce 1,500 electrical megawatts
17 through some other means other than a power station in
18 this county.

19 The effects of coal are well-known. It
20 affects either the air we breath or the mountains that
21 have to be mined for the fuel and the lime to use to
22 clean it. If you're going to go with clean coal

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 technologies, it uses a huge amount of materials in
2 order to keep that material clean and it has to come
3 from somewhere.

4 If you want to use wind, then consider
5 that some of the best capacity factors for wind are
6 about 33 percent. So you need an installed capacity of
7 wind turbines of 4,500 megawatts and a storage
8 mechanism to replace 1,500 megawatts of nuclear power.

9 And how much land is that going to take up and what is
10 the effect on the migratory bird populations as a
11 result?

12 We won't go into what the possibilities
13 are with solar and some of the other mechanisms that
14 are available, but we are going to need this power.
15 You can't say, well, we just won't use it.

16 Now, I am a member of the public. I am a
17 landowner in Louisa County and I am proud. I'm almost
18 done. I am proud to be a Dominion employee and I do
19 not speak for the company. I speak for myself, but I
20 would invite you to consider that every other Dominion
21 employee at that power station has more at stake in
22 seeing that company and that plant well-run rather than

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 less for not being an employee, because our livelihood
2 depends on making sure that it's safe and done right.

3 And our children depend on us to come home
4 safely every night. And I do not surrender my right to
5 think and speak for myself just because you don't care
6 for who my employer is. Thank you.

7 (Applause)

8 HEARING OFFICER MURPHY: Lisa Shell and
9 then Allan Lassiter. Please, be careful of the cables,
10 Ms. Shell.

11 MS. STILES-SHELL: I believe someone
12 surrendered their time, so I have like 10 minutes,
13 Addison Hall.

14 HEARING OFFICER MURPHY: And that will
15 give you six. Addison Hall, I believe? Is someone
16 contributing time to this?

17 MS. STILES-SHELL: One person did, that's
18 what they said.

19 HEARING OFFICER MURPHY: Okay. Please.

20 MS. STILES-SHELL: My name is Lisa Stiles-
21 Shell. I spoke last night. Some of what I said I will
22 repeat, but I have been trying to change things around

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 as I hear what is being said. I'm temporarily living
2 in Washington, D.C., but my permanent residence is in
3 Henrico County. I am a nuclear engineer by training
4 and have worked in the nuclear industry for more than
5 10 years, mostly in used fuel management.

6 Recently, I have made a career change.
7 First I realized that I just don't have the temperament
8 to be an engineer forever, partly because I like to
9 talk too much. So if anybody has any questions about
10 some of the things I talk about, please, contact me and
11 I will talk your ear off.

12 This realization came to me, the
13 temperament thing, at about the same time as the
14 nuclear debate began in Ewing, Virginia and I was
15 shocked and amazed at the propaganda and the
16 misinformation that is perpetuated by anti-nuclear
17 groups, and I was spurred into action. I now work in
18 public outreach and communications.

19 I am also the past president of the North
20 American Young Generation in Nuclear and a member of
21 the Local Virginia Section. Many of the local members
22 that are here tonight are residents of Louisa or other

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 immediately surrounding counties. NA-YGN was formed in
2 1999 as an organization that unites young professionals
3 that share a personal conviction that nuclear science
4 and technology make important and valuable
5 contributions to our society.

6 One of the group's primary missions is
7 public information. We believe that public discourse
8 often does not give fair play to the benefits of
9 nuclear technology or the truth about solutions to
10 safety and environmental concerns. As young nuclear
11 professionals, we are in a unique position to give
12 balance to the issues and share our firsthand knowledge
13 and expertise with our friends, neighbors, elected
14 officials and media representatives.

15 As nuclear technology relates to
16 electricity generation, we want to tell everyone the
17 success story that is nuclear power in our country.
18 Nuclear energy is safe, clean and reliable and is an
19 important part of a balanced energy mix. Currently,
20 nuclear provides about one-fifth of our nation's
21 electricity and about one-third of Virginia's.

22 In Virginia the power output of the Surry

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 and North Anna plants represent about 27 million metric
2 tons of carbon dioxide emissions avoided each year,
3 about 165,000 tons of sulphur dioxide which contributes
4 to acid rain, and 46,000 tons of nitrogen oxide which
5 contributes to ground level ozone and smog. That is
6 the equivalent of 2.4 million passenger cars.

7 Tonight's meeting demonstrates the
8 benefits of the new licensing process for nuclear power
9 plants. That is that safety, environmental and
10 licensing issues are resolved before large capital
11 investments are made. Dominion's original ESP
12 application utilized a once-through cooling system for
13 Unit 3 just like the existing units.

14 Personally, I believe that the
15 environmental effects of a once-through system in the
16 original design, original proposal, were minimal and
17 were more than offset by the benefits of additional
18 generation capability. However, I recognize that not
19 everyone shared my opinion and that the Virginia
20 Department of Environmental Quality and nearby
21 residents raised concerns about the impact on lake
22 temperature that a third unit would have.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 As a result of the public process,
2 Dominion modified its proposed design to include a
3 cooling tower for a third unit to address the concerns.

4 That is exactly the way the system is supposed to
5 work. So as nuclear professionals and as concerned
6 local citizens, we at NA-YGN believe that the Virginia
7 Department of Environmental Quality should grant
8 Dominion Coastal Zone Certification.

9 The environmental report of Dominion's ESP
10 application demonstrates in great detail what has
11 become obvious in an area of increasing concerns about
12 global warming, air pollution, environmental
13 protection, energy security and industry safety. That
14 is in spite of the skewed claims of the small minority
15 of anti-nuclear activists, nuclear power has perhaps
16 the smallest impact on the environment, including
17 water, land, habitat, species and air resources.

18 And life cycle emissions, and I'm talking
19 from the mining all the way to environmental
20 remediation, show that per kilowatt hour the impact of
21 nuclear energy is among the lowest of any form of
22 electricity generation, including wind and solar.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 And as an aside, we are not here to debate
2 the issue of spent nuclear fuel, but others have
3 mentioned it, I would like to add that as an engineer
4 who has years of experience working and performing
5 research in the management of nuclear waste, I can say
6 with confidence that the problems of transportation and
7 disposal are political and not technical.

8 Unfortunately though, I continue to find
9 anti-nuclear groups misleading the public with their
10 propaganda and scare tactics. I wish I had the time
11 tonight to refute all the misinformation that I heard
12 last night on issues like security and safety and
13 health, but we are here to discuss environmental
14 concerns and I will focus most of my comments on those.

15 One of the claims that was made, that has
16 been made over and over again and is still on an anti-
17 nuclear website, concerns cancer rates near North Anna.

18 Oh, wait, I crossed that out. Sorry, that was from
19 last night. I said I wouldn't talk about health.
20 Sorry about that. Okay.

21 Back to environmental concerns. Anti-
22 nuclear websites claim that a cooling tower for Unit 3

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 will evaporate more water than a once-through system
2 which will cause the lake level to be permanently
3 lower. While that will be true for older designs, the
4 state of the art cooling system that Dominion has
5 proposed for Unit 3 would evaporate significantly less
6 water.

7 That is just what we have been talking
8 about. Plus where lake levels are concerned, a dry
9 cooling system will be used to maintain lake level and
10 downstream flow. Last night I got into a discussion we
11 have heard more about tonight about evaporation rates.

12 Last night, I admit, I did not recall the exact
13 evaporation rates of once-through systems, conventional
14 cooling towers and the hybrid design.

15 But really, what I really care about and
16 what I think we all care about is the lake level, the
17 temperature and the downstream flow. If all those
18 needs are met, which they are by Dominion's proposed
19 design, why would I care about the evaporation rates?

20 And I know something was mentioned earlier
21 about the water cycle, but it's true. If all these
22 needs are met, the water cycle is the water cycle. We

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 evaporate water one way or another. It forms clouds
2 and it rains. I did say that. It was quoted and I was
3 quoted correctly. But in the interest of being
4 thorough, I looked into more detail today at the anti-
5 nuclear group's claims.

6 I'm a nuclear engineer, which means I
7 don't know much about practical things, about
8 hydrology, so I had to do a little research, but this
9 is what I came up with. First, I'm going to address
10 downstream flow again. Before Dominion built the dam
11 to support four units, as we have heard, the North Anna
12 River, as my colleague, Mike Stuart, succinctly put it,
13 was nearly a dry creek bed, virtually devoid of life.
14 It was a dead river.

15 Downstream flows were erratic. Either the
16 area was flooded or it was completely dry. Since
17 nuclear came to Louisa, downstream flow has vastly
18 improved and the average flow over the dam is about 270
19 cubic feet per second, that's over 25 years. Normally,
20 Dominion is required by law to maintain a minimum flow
21 of 40 CFS. In times of prolonged drought when the lake
22 level drops below 248 feet, they must maintain 20 CFS.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 With the proposed cooling system, if we
2 were to experience prolonged dry weather, such as the
3 rare 80 year drought we had in 2001/2002, the third
4 unit might cause the amount of time that flow would be
5 reduced to 20 CFS to increase by about 2 percent. I
6 did hear a comment earlier about the differences
7 between Dominion's ESP application and the NRC Draft
8 Environmental Impact Statement, the difference in the 5
9 percent versus 11 percent.

10 And when you look at the data, that's
11 because Dominion did a very, very detailed day-by-day
12 analysis including when the temperature rises at this
13 and the humidity is this, then the hybrid cooling tower
14 is much this wet, this much dry, very, very detailed
15 analysis. That's how they came up with their 5.7
16 percent.

17 The NRC, they aren't trying to get -- they
18 are trying to verify the system. They can use a very
19 simple, more conservative of what engineers call
20 "bounding analysis," so they put very conservative
21 assumptions and rather than the day-by-day type of
22 detailed analysis, they used an average rate, which is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 more conservative. And that's the difference between
2 the 5 percent and 11 percent and you can find that in
3 the detailed analyses that are out there.

4 So after all this, I was still left to
5 wonder that if the impacts on lake level temperature
6 and downstream flow are clearly negligible, why do we
7 care about the various evaporation rates? The only
8 answer I could come up with is that it's the only way
9 to make it sound bad. But looking at the numbers --

10 (Applause)

11 MS. STILES-SHELL: -- I see that one has
12 to work pretty hard to do even that. First, the letter
13 the Public Citizen wrote to request a public hearing
14 quotes evaporation rates from a 1978 report, I was 6
15 years-old, that did not take into account 18 years of
16 improvements in cooling tower designs and do not even
17 apply to conditions in North Anna.

18 Furthermore, the numbers that were tossed
19 around last night by some nuclear opponents were a
20 disturbing case of comparing apples to oranges to tofu.

21 Some of their numbers were average expected rates,
22 some were maximum expected rates and some were bounding

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 theoretical maximum rates. You just can't make
2 meaningful comparisons like that.

3 Anti-nuclear groups have made all sorts of
4 claims related to the fish of Lake Anna. It seems they
5 conveniently forget that Lake Anna was created
6 specifically to support nuclear power plants. As we
7 mentioned earlier, some of the fish that they are so
8 worried about are not indigenous to this area.

9 HEARING OFFICER MURPHY: One minute.

10 MS. STILES-SHELL: Okay. So the fish
11 aren't indigenous. Okay. I'll skip the solar and the
12 wind. Okay. Somebody mentioned economics earlier.
13 Right now, nuclear economics. The nuclear has the
14 lowest production cost of anything in this country,
15 except hydro, and we only have so many rivers we can
16 dam up. The cost that the anti-nuclear groups are
17 bringing up are from a study done at MIT, but that was
18 many years ago, and several of the assumptions that
19 were made just no longer apply.

20 One of the most obvious ones that at the
21 time natural gas prices were low, prices now are about
22 double the assumptions and there are many assumptions

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 in this particular study that just don't apply any
2 more. The Energy Policy Act that was mentioned did not
3 single out nuclear. Our legislators recognize it is
4 critical to address now increases in future power
5 demand while focusing on environmentally friendly
6 generation.

7 Legislators recognize that nuclear's role
8 providing 20 percent of our electricity, 74 percent of
9 our non-emitting electricity and that we can't possibly
10 meet our Clean Air goals without it. Yes, there are
11 limited incentives. The \$10 to \$14 billion assumes a
12 lot of things that are not -- we can't necessarily
13 assume, but, like I said, nuclear was not singled out
14 and it's a very limited set of incentives for a few
15 years for the first few plants.

16 Wind and solar have an indefinite
17 production tax credit that they have been getting for
18 years and years and will get for the foreseeable
19 future. The nuclear is very small just to test the new
20 licensing process and to maintain its contribution in
21 our electricity mix. Thank you very much.

22 (Applause)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 HEARING OFFICER MURPHY: The next speaker
2 is Allan Lassiter and then Kit Powell. Please, be
3 careful of the cords. Thank you, Mr. Lassiter.

4 MR. LASSITER: And thank you, Mr. Murphy.
5 My name is Allan Lassiter. I own property in Sunset
6 Harbor subdivision on the cold side, the public side of
7 Lake Anna in Spotsylvania County, so I do own property
8 that is in the Coastal Zone Management area of the
9 State of Virginia.

10 I also am on the Board of Directors of our
11 property owners association. We only have 30 families,
12 so I do represent 30 tonight. I'm also a member of the
13 Lake Anna Civic Association as well as the Friends of
14 Lake Anna and I support and endorse the recommendations
15 that they have presented tonight and last night and I
16 ask that DEQ further consider those comments in your
17 consistency review.

18 The first thing I would like to say is
19 last night I got on at 11:03, so I appreciate the time
20 tonight. And I hope we can all finish by 10:00. I
21 would like to address the two issues dealing with water
22 quality or water use, of course, Mr. Ruth and a lot of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 other people earlier have cited the new information
2 from state agencies. What I would like to do is go
3 back to the original information, which, of course, is
4 information in the Draft EIS itself, because the
5 supplement offers some interesting ideas and
6 conclusions on water impacts.

7 On Page 5.12, dash 12, the obvious
8 conclusion due to the Unit 3 cooling change is that
9 "The thermal impacts will be small," so I'm getting
10 back into the language last night, and that "mitigation
11 is not warranted." Well, of course, No. 3, the design
12 change changes everything. And as most people said,
13 thank you, Dominion, for doing that. But further in
14 that paragraph of 5-12, same page, "Because there is no
15 data on the chemical affluent in the discharge water
16 from Unit 3, those water quality impacts of that
17 discharge are still unresolved."

18 On Page 5-19, under water use, it states
19 "Because the combination of wet/dry unit for No. 3
20 water impacts will be small, of course, with no
21 mitigation needed during normal years, but temporarily
22 moderate in severe droughts." And this quote is what

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 got me. "Further mitigation other than ceasing or
2 derating operations is not warranted." Let me repeat
3 that. Further mitigation other than ceasing or
4 derating operations is not warranted.

5 This seems to be a draconian measure in
6 this document and I think it needs further study. It
7 does go on to suggest one of the options that was
8 mentioned earlier was increasing the overall capacity
9 of the reservoir by raising it between 6 and 10 inches
10 as discussed both by NRC and Dominion. Of course, that
11 option produces a lot of other problems as well.

12 So I think all these issues again need to
13 be taken in light of the official study done by the NRC
14 and Dominion, not any of the other documents that
15 people have been talking about tonight. It also
16 iterates the same points on Page 5-3 through 33 when it
17 is discussing all of the downstream impacts, the ones
18 that several speakers have mentioned tonight. It does
19 remind us that those same issues would be relevant to
20 those problems. And last but not least, it reminds us
21 though that all of these issues are under the
22 jurisdiction of the Department of Environmental Quality

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 and not the Nuclear Regulatory Commission.

2 The other issue I would like to cover is
3 the fact that LACA has mentioned as an alternative to
4 the way of dealing with this issue would be
5 modifications to the Lake Level Contingency Plan. They
6 have given some numbers to consider. There is another
7 point that some other people have suggested and maybe
8 there should be a different triggering mechanism and
9 that's based on the discharges to the dam as opposed to
10 the mean sea-level elevation of the lake itself.

11 That way you could anticipate droughts not
12 by the level of the lake itself, but by the historical
13 comparison of flows through the dam. In other words,
14 you have a little bit of extra time ahead of time to
15 make some decisions about what to do with the lake
16 level.

17 One other issue I would like to raise is
18 the fact that there has been a lot of other issues that
19 have come out of this entire process dealing with water
20 quality and regulatory issues, both in the cooling
21 lagoons as well as the lake itself. A lot of them have
22 been discussed by Friends of Lake Anna and Lake Anna

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Civic Association, but the one that concerns me the
2 most is the lack of water quality testing data on the
3 streams that feed into the cooling lagoons. That would
4 be Elk Creek, Millpond Creek, Rock Creek, a lot of the
5 elements over there.

6 My understanding is that those segments
7 are not tested for water quality at those points that
8 they flow into the lagoons, because, of course, the
9 lagoons are not subject to water quality testing.
10 Thus, there's no data to determine if they are impaired
11 and thus, no requirement for the TMDS study. If that's
12 the case, I would recommend that DEQ consider
13 initiating that testing in order to determine whether
14 those studies are needed.

15 And I mention that because the last two
16 years I participated in the Lake Anna Tributary TMDS
17 Study, the ones that were done up lake on Terry's Run,
18 Pamunkey Creek in the areas that I live near. I find
19 the process to be very valuable. It's a very good
20 detailed study. It looks at all the pollutants that go
21 into the waterways and I think with such a study, the
22 Louisa County residents could learn, study and learn

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 what they could additionally do to protect the water
2 quality of Lake Anna.

3 Thank you for the opportunity to comment.

4 Again, I greatly appreciate what Dominion has done in
5 changing the cooling design on Unit 3 and I also would
6 like to state appreciation for the hundreds, if not
7 thousands, of hours spent by the Commonwealth of
8 Virginia environmental employees in dealing with this
9 matter on behalf of the citizens of the State of
10 Virginia. Thank you very much.

11 (Applause)

12 HEARING OFFICER MURPHY: The next speaker
13 is Kit Powell and then Todd Flowers. Please, be
14 careful.

15 MR. POWELL: Okay. My name is Kit Powell.

16 I'm from Forest, Virginia and my concern and what I
17 would like from the Department of Environmental
18 Quality, I got that right, DOE in Washington State, is
19 an adequate energy supply. Now, there's a reason I'm
20 worried about that. I'm a returning resident to
21 Virginia. I lived here as a Navy officer in the last
22 energy crisis. You wonder why I'm concerned?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 I just came from the left coast. The left
2 coast found a magic way of coming up with enough
3 electricity. About 10 years ago I was at a meeting and
4 one of the people, one of the head agencies asked gosh,
5 we're going to make your electricity with natural gas.

6 Do we have enough pipeline capacity? I looked over at
7 my boss. We knew the answer to that question. My
8 company had enough pipeline capacity for one-third of
9 the electricity that was needed in the pacific
10 northwest.

11 We were developing renewable energy
12 projects to meet that need with other sources.
13 Washington solved its problem. While Virginia is
14 gaining 5 percent employment, Washington lost 3 percent
15 employment. Why am I here by the way? They didn't
16 build any renewable energy projects. So anyhow, back
17 when I was a student, mechanical engineering student,
18 Purdue University, I did not need my slide rule to
19 figure out that grain rotting on the ground because
20 there wasn't natural gas to dry it had environmental
21 impact.

22 When I was an environmental engineering

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 student at Washington State University, I did not need
2 a complex computer model and detailed life cycle
3 analysis to figure out that dumping milk on the ground
4 in California, because there was not enough
5 electricity, had environmental impact. Does anybody
6 from the Department of Ecology know what the BOD of
7 milk is?

8 And as a young Naval officer, I didn't
9 need anybody to explain to me that my mom's heating oil
10 while I was in the Navy went from 15 cents a gallon to
11 \$1.25 a gallon and somebody had to explain to me why
12 she was trying to heat her house with natural gas from
13 her stove. There was some impact there called
14 pneumonia and death.

15 Okay. So I have heard this group here. I
16 kind of remember a line from the last election. Well,
17 I was for it, before I was against it. They are for
18 something until there is an actual project. So when
19 you look at life cycle analysis, there is impact for
20 everything. And I appreciate that Dominion has the
21 foresight to provide for electricity when cooling my
22 house may keep me alive a little bit longer. Maybe

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 they won't need it, but I appreciate the foresight.

2 But I don't know whether it is going to
3 get built, maybe another coal plant in West Virginia
4 will provide the electricity. But I hope somebody
5 builds that power plant. Thank you very much.

6 (Applause)

7 HEARING OFFICER MURPHY: Yes, sir. Todd
8 Flowers and then I'll just have to go with that one.

9 MR. FLOWERS: I'm Todd Flowers. I'll be
10 very brief tonight. I'm not only an energy and water
11 conservationist, but a free-time conservationist and I
12 would like to get home at some point in time as well.
13 I currently reside in Richmond, but I spent the first
14 18 years of my life in Hampton along the banks of
15 Little Back River. And I probably spent more time in
16 the summer crabbing and fishing and skiing along Little
17 Back River as I spent sleeping at night. I have always
18 valued the Chesapeake Bay and its watershed.

19 In high school I wrote a paper about the
20 Chesapeake Bay being Virginia's most valuable asset and
21 that paper awarded me a scholarship from the Colonial
22 Soil and Water Conservation District, which is where I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 lived. So with that said, I reviewed the criteria of
2 the Coastal Zone Program in say Virginia and I would
3 like to be on the record tonight for my opinion that
4 Dominion's revised Early Site Permit fully complies
5 with the Coastal Zone permit. Thank you.

6 (Applause)

7 HEARING OFFICER MURPHY: I need to
8 apologize in advance for this one. I know I'm not
9 going to get close, but Sama and Laden is the last
10 name? I can see have badly missed. I apologize.
11 Thank you. Please, be careful of the cords. Okay.
12 Thank you.

13 MS. LEON: Good evening. My name is Sama
14 Bilbao Leon and I am a resident of Henrico County in
15 Virginia. I am also a member of the Virginia Section
16 of the America Nuclear Society and the North American
17 Young Generation in Nuclear. I am speaking here
18 tonight to voice my support for Dominion's request of
19 Coastal Zone certification for the proposed new
20 reactors at the North Anna site.

21 After reviewing the applicable
22 documentation, it is my understanding the NRC approval

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 of the ESP of North Anna would be consistent with
2 Virginia's Coastal Zone Management and I am asking the
3 Commonwealth of Virginia to concur with Dominion's
4 certification. Since the proposed site for the new
5 nuclear reactors at North Anna is not located within
6 the Virginia Coastal Zone, I gather that the only way
7 that this activity could impact Virginia's coastal
8 resources would be by affecting the Spotsylvania County
9 side of the Lake Anna. Therefore, the only water
10 impacts seem to be relevant to the certification.

11 So I have reviewed Dominion's proposed
12 plan parameters envelope for the new nuclear power
13 plants at North Anna and they show that the impacts on
14 Lake Anna will be extremely small. Dominion's original
15 plan of once-through cooling already show there is no
16 environmental impacts on Lake Anna. And in response to
17 concerns by the State of Virginia by the local
18 community, Dominion has revised the original plan to
19 include a state of the art hydrant drywell cooling
20 tower, which will reduce further the already very small
21 environmental impact of the original plan.

22 The use of cooling towers reduces

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 enormously the amount of water usage that will be lost
2 due to water evaporation and completely eliminates any
3 water pollution on the lake. And, of course, this also
4 means that this revised cooling system has negligible
5 impact on fisheries and other wildlife.

6 So now, I have a couple of other comments
7 that go in addition to these. First of all, I want to
8 remind everybody and some people have already done this
9 is that Lake Anna is a manmade reservoir that was
10 specifically created to be the ultimate heat-sake, that
11 means to cool down North Anna. So Dominion owns the
12 land where Lake Anna is and it is a very good neighbor
13 that allows the local residents to have full use of the
14 lake and enjoy it.

15 I think that because Dominion has
16 maintained a phenomenal environmental stewardship of
17 the lake and its surroundings, it is the reason why
18 Lake Anna, it is right now, is one of the most popular
19 recreational areas in Virginia. And it is also the
20 reason why some of the -- I mean, it has one of the
21 highest property values in Virginia. So, I mean, I
22 think it is obvious that because Dominion is doing a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 very, very good job maintaining the environmental
2 quality of the lake and its surrounding area, we all
3 are enjoying the lake.

4 Another thing that I wanted to say, it has
5 been mentioned that we -- some people are concerned
6 that because we seem to be experiencing climate change
7 and global warming, there is higher temperatures in the
8 lake and somehow there is a concern whether or not
9 putting a new nuclear power plant will have an impact.

10 I am just kind of completely shocked by
11 this. So here we have one of the few large scale,
12 clean, environmentally friendly forms of energy
13 generation. In fact, this is the only one large scale
14 energy source that can provide emission-free generation
15 and you are telling me that this is something that we
16 should not use and this is the only way that we have to
17 avoid or to mitigate the effects of climate change. I
18 don't understand.

19 I have also heard that nuclear does not
20 contribute to public health and safety, and I beg to
21 disagree. The fact that we have cheap and reliable
22 electricity makes the United States one of the most

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 advanced countries in the world as compared to some
2 other countries that don't have access to this cheap,
3 clean, reliable electricity.

4 I also have heard two things that are kind
5 of confusing to me, that on the one hand I heard that
6 Dominion is this evil, big company that only wants to
7 make a buck. But then I hear in the next sentence how
8 it makes no sense whatsoever to build a new nuclear
9 power plant because it is so expensive. So which one
10 is it? I don't understand.

11 (Applause)

12 MS. LEON: I mean, the fact -- one minute.
13 The fact is that, well, this has been said already,
14 that nuclear is currently one of the cheapest forms of
15 energy. I mean, it is the cheapest other than hydro in
16 the United States.

17 And, finally, I wanted to say that I take
18 issue at the people that assume that because some of us
19 are employed by Dominion, we don't have families that
20 we care about. We don't care about the environment
21 and, furthermore, we don't have any personal or
22 professional ethics. Is that what you're saying?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 I mean, I really am personally extremely
2 proud of the work that I do every day, because I can
3 see the very extremely enormous positive impact that my
4 work makes every day for the community. And,
5 certainly, that makes me extremely proud. I mean, I
6 just want to say that I don't believe in nuclear
7 because I happen to work for Dominion.

8 It's completely the opposite, because I
9 know that nuclear is one of the best forms of producing
10 large scale energy nowadays. That is why I work in the
11 nuclear industry. Thank you.

12 (Applause)

13 HEARING OFFICER MURPHY: The next speaker
14 is Barbara Cruickshank, then Jerry Rosenthal and then
15 Jim Adams. Ms. Cruickshank, please, be careful of the
16 cable. I apologize.

17 MS. CRUICKSHANK: Yes. My name is Barbara
18 Cruickshank and I am a citizen of Virginia. I live in
19 Albemarle County and I am speaking tonight as a citizen
20 and a community health care provider.

21 Cheap energy does come at a price. One
22 important measure of the health of the community is how

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 we care for our most vulnerable resources, our
2 children, the elderly, handicapped, poor and our
3 environment. Let's see how we're doing as stewards of
4 the community health here.

5 The cancer rates in children have
6 increased by a third from 1975 to 2001. The American
7 Lung Association in their report on the state of the
8 air in Virginia in 2005 and in 2006 again has given
9 Virginia a grade of F in ozone pollution.

10 Our waterways are under constant stress,
11 reported fish kills a constant reminder of the
12 pollutants that are entering our streams and rivers,
13 tons and tons of radioactive waste stored near nuclear
14 power plants around the country, radioactive waste
15 leaking into ground water in Illinois, Arizona, New
16 York City.

17 How are we doing with the community
18 health? What is the state of the health of this
19 community and what will our legacy be? Citizens want
20 clean, renewable and sustainable energy sources.
21 Citizens want clean waterways, clean air,
22 biodegradable, reusable waste not toxic, radioactive

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 waste. What do we do with all of this toxic waste?

2 The health of our community is measured by
3 how we care for our most vulnerable and valuable
4 resources, our children and our environment. We and
5 future generations will live with the consequences of
6 our actions here in Virginia. Thank you.

7 (Applause)

8 HEARING OFFICER MURPHY: Jerry Rosenthal
9 and then Jim Adams and then Patrick Hanley. Mr.
10 Rosenthal, please, be careful of the cables. I saw you
11 last night. Move over that way. There you go.

12 MR. ROSENTHAL: Thanks. My name is Jerry
13 Rosenthal. I am a long-term resident here in Louisa
14 and I guess according to the young nuclear engineers, I
15 am one of those professional agitators even though I
16 have gotten zero dollars in 30 years. So that's an
17 interesting way to deal with this.

18 First, I want to give a big thank you to
19 the Friends of Lake Anna and Harry Ruth and, finally, a
20 little thank you to Lake Anna Civic Association and
21 Bill Murphey for finally and belatedly coming to a
22 little awareness about the effects of Dominion's plans.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Tonight I want to speak primarily to the
2 DEQ about what they are talking about with this Coastal
3 Plan. A scientist, in order to properly assess the
4 water quality and issues, you need to get to the source
5 and the source here is what is going to happen at Lake
6 Anna. So we're going to deal with any potential
7 pollution, thermal, other types, all the loss of water
8 from the source, which is the lake, caused by the
9 operations of the plant.

10 Accepting the entire lake, including the
11 cooling lagoons, is under your responsibility seems
12 clearly a sensible and direct way to address the issue
13 as we look as to what is going to happen as this stuff
14 goes down. Recognizing climate change is also an
15 important thing. February 2006 this year, first time,
16 zero rainfall ever. If you ask any climatologist in
17 the State of Virginia, do we ever get zero rainfall in
18 a month, they would say no. We have got 100 years of
19 records, 120 months, oodles. That's 1,200 months.
20 Zero. That is how we did. It's not going to get
21 better.

22 Four points to consider for the DEQ.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 First, construction. According to the ESP, they can
2 start construction as soon as they have got this. If
3 we start digging in the mud, are we going to disturb
4 PCVs? Is this something that is going to come down?
5 Is this going to affect FEGs, the operations of the
6 plant?

7 Decommissioning. Even if the DEQ doesn't
8 accept responsibility for the cooling lagoons now, when
9 the plant is decommissioned, does that now become under
10 your jurisdiction and, if so, what are the effects of
11 what is going to happen now? And, lastly, we need to
12 deal with accidental releases. We have got the normal
13 releases, an accident which could be small to medium or
14 a catastrophic accident.

15 And, secondly, let's look at the effects
16 on each of these things. We have effects on the cold
17 water side, the hot water side, downstream, the North
18 Anna River, the Pamunkey, the York, down to the
19 Chesapeake Bay. What are the effects on fish,
20 shellfish, wildlife, public health, safety, welfare?

21 For the state and our community, we need
22 to think. If yes is given to this ESP, the state and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 the locality, including the DEQ, loses its rights by
2 the law for 20 to 40 years. You can't object
3 afterwards. It's done. You're finished. We're all
4 finished. You get this ESP, we're cooked. You can't
5 go back. You can't ask again. You have lost all of
6 your rights. That is how it's written.

7 Do you want to give up your rights for 20
8 to 40 years when you don't know what is going to
9 happen? I think not. And that is no matter what
10 happens, growth at the lake, changes, changes in the
11 weather, changes in water use. The DEQ, the State of
12 Virginia, Louisa County, every citizen in here loses
13 their rights. That's the law.

14 Any future water withdrawals for
15 Spotsylvania, Hanover eliminated. Upstream water
16 withdrawals, Orange, in west, these could have effects.

17 I shall be finished quickly.

18 HEARING OFFICER MURPHY: Okay.

19 MR. ROSENTHAL: And it will severely
20 affect us now. I urge the DEQ to deny the
21 certification to the consistency permit at this time.
22 Take the time, study this carefully for the benefit for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 all of us on the lake, downstream, all the citizens of
2 the State of Virginia. Thank you.

3 (Applause)

4 HEARING OFFICER MURPHY: Mr. Adams, Mr.
5 Patrick Hanley next.

6 MR. ADAMS: So hi, I'm Jim Adams and I'm a
7 local. What I am concerned about is, well, 50 years
8 ago when I started being an anti-nuclear activist, one
9 of the biggest issues was what do we do with the
10 garbage? Somebody has got to take out the garbage.
11 And 50 years from then, right now, we're still arguing
12 about who is going to take out the garbage, who is
13 going to -- how are we going to get rid of this waste?

14 Now, I have got a problem with the word
15 waste, which is what the industry normally calls the
16 refuse that they have. It's a resource. It's a
17 euphemism for something that we don't have a term that
18 really defines it well. This is the most poisonous
19 substance on the face of the earth. It is lethal. I
20 admire very much what the industry has done in taking
21 care of the safety around such a lethal substance, but
22 consider that this is the only substance on the planet

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 that can possibly sterilize a planet.

2 We're committed to not having -- not
3 causing that, but there are others out there who are
4 not quite so committed as we are. This is a substance
5 that requires security and guarding. Can you imagine a
6 solar installation that has the kind of guards that a
7 nuclear plant has? And so one of these days, something
8 is going to happen to some nuclear plant somewhere and
9 this will start everybody getting increased security.

10 That is something that worries me and for
11 the DEQ, we are going to be storing, well, for the
12 foreseeable future, at least 40 tons of nuclear waste a
13 year, 40 tons of this garbage, in the various lagoons
14 around the plant. If we grant the two, it's going to
15 go up to 80 tons a year on up to 60 years from now, at
16 which point, as Jerry mentioned, that there are going
17 to be decommissioning and you will have no voice until
18 that time, in which case you get the responsibility for
19 dealing with it.

20 We know that the nuclear casks have a life
21 span. They have not yet come up with the, another
22 euphemism, 10,000 year life span for the casks.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Everything we have done so far has a life span and it
2 starts leaking. As long as Dominion has on-the-spot
3 responsibility for those casks, they will work. What
4 happens when Dominion no longer has that
5 responsibility?

6 How far out are you, DEQ, looking into our
7 future? Are you doing what most of us do here looking
8 at the eternal now? What we have today is what we're
9 going to have tomorrow, which is what we will have the
10 next day, abhorringly on and on and on. Reality
11 doesn't work that way, people.

12 Somewhere along the lines there is a
13 comeuppance that happens and who is going to deal with
14 it? As Jerry also said, and I have said before quite a
15 long time also, the nuclear waste is out there. It
16 doesn't look likely that we're going to have a
17 repository for it. In the 1950s we were talking about
18 sending it into the site. That is not going to happen
19 either. So we have got it, people. That is our
20 future. That is your kids' future if you continue to
21 live around here.

22 What are we going to do about it? Jerry

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 is very correct when he says that for 40 to 60 years we
2 have no voice once we approve this. So I am asking DEQ
3 at best to reject this request, at worst to accept it
4 with strong, strong considerations. What are we going
5 to do with the waste? What are we going to do about
6 the questions that other people have raised? So thank
7 you very much.

8 (Applause)

9 HEARING OFFICER MURPHY: Thank you, Mr.
10 Adams. Patrick Hanley, then Donald Day and Joseph
11 Pastor. Please, be careful of the cables.

12 MR. HANLEY: My name is Patrick Hanley. I
13 am Chairman of the Louisa County Chamber of Commerce
14 representing the businesses in the local area. We
15 support approval of Dominion's request for additions to
16 their plant. The addition of one reactor is good for
17 the local economy. The addition of two is better.

18 Dominion is a good corporate citizen.
19 They pay their taxes. They employ more than 900 people
20 at the plant with average wages significantly higher
21 than the wages of the community as a whole. They
22 produce good, clean energy and they help to reduce our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 dependence on oil.

2 The proposal to expand the capacity of the
3 North Anna plant should be applauded. It makes sense.

4 It increases tax revenue at little expense to the
5 community. It adds high paying jobs for construction
6 and ongoing operations. It is at the leading edge of
7 initiatives to reduce our dependence on oil, and it is
8 good business and it is good for business. Thank you.

9 (Applause)

10 HEARING OFFICER MURPHY: Yes, sir? Donald
11 Day. Please, be careful of the cables, sir.

12 MR. DAY: All right.

13 HEARING OFFICER MURPHY: Thank you. Thank
14 you for your patience.

15 MR. DAY: Thank you very much. My name is
16 Donald Day. I am a resident of Albemarle County and it
17 was actually about 35 years ago that I was an employee
18 at the North Anna Nuclear Power Station as a
19 carpenter's helper for Stone and Webster.

20 And while I didn't know much carpentry, I
21 was a good helper and I listened to the conversations
22 about nuclear energy and nuclear power, and I went back

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 to the University of Virginia and became a physicist,
2 got my undergraduate degree in physics, and then I went
3 to graduate school and got my Ph.D. in nuclear physics.

4 And during that time I took a great
5 interest in nuclear power and everything surrounding
6 it, and energy policy and things like that, which has
7 led me to the steady conclusion that, in fact, this
8 application should be refused.

9 Let me just say I want to thank the DEQ
10 for giving us this opportunity and I will just be very
11 brief before I get to the meat of my presentation which
12 also is brief, but to say why I oppose this increase in
13 the nuclear power plants in Louisa County. Of course,
14 there is really four major reasons. One, of course, is
15 the increased risk of terrorism in Louisa County.

16 I mean, I won't belabor that. I think all
17 of us recognize that this risk exists. It can only be
18 getting worse, as we can see in recent events. There
19 is also the unresolved problem of nuclear waste
20 disposal. Every year, every time they refuel the power
21 plants at North Anna, additional waste is removed, it
22 has no final resting place.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Third is the failure of this technology
2 really to compete in the marketplace and its continued
3 need for public subsidy. And, finally, it is our
4 foolish -- society's foolish reliance on electricity
5 and the use of electricity for end uses that are really
6 inappropriate, and this is manifested at every fossil
7 plant and every nuclear power plant in the country, in
8 that to produce one unit of electricity, to ship off
9 one unit of electricity at a nuclear power plant or one
10 unit of electricity at a fossil plant, you have to dump
11 two units of energy into the environment.

12 It doesn't matter what kind of power plant
13 it is. It doesn't matter where it is. That is just a
14 fundamental characteristic of electricity generation
15 since we shouldn't use electricity for uses that are
16 inappropriate.

17 Now, this new activity at Louisa and at
18 the lake will only exacerbate this condition that
19 already exists there and this huge amount of energy,
20 heat that is going to be released, into our scarce
21 water resources of Virginia really just cannot be
22 tolerated. And it's time for all of us to realize that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 this is -- the issues facing DEQ tonight really have
2 nothing to do with nuclear power. It just has to do
3 with the fact that they are going to be dumping huge
4 quantities of heat into our scarce water resources.

5 So it's really critically important that
6 the DEQ examine these in great detail. So these new
7 plants, these new plans, will place an unacceptable
8 burden on Virginia's water resources and it's not just
9 restricted to Louisa, and I know the concerns of those
10 people around the lake and the community and their
11 property values and the heat of the water temperature
12 in the lake, but it's not restricted just to you.

13 It goes into the North Anna River, the
14 Pamunkey, the Mattaponi and the York and, finally, the
15 Chesapeake Bay. So our responsibility at this stage as
16 this highly advanced technical society is not to view
17 our water resources as something to consume. Rather,
18 every one of our acts today should be to reverse our
19 past mistakes and to undue trauma that we have
20 inflicted upon the natural world.

21 This project does not do that. Rather, it
22 views our natural resources as something to be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 exploited and to be abused. There are alternatives and
2 they require more than the repackaging of an old
3 technology. It requires new ideas. Some of these
4 ideas are obvious to all of us like turning down the
5 air conditioning in this room. Some require a little
6 more thought.

7 I encourage the DEQ to acknowledge that
8 the project is not consistent with enhancing Virginia's
9 water resources, the fisheries and all its recreational
10 users. Thank you very much.

11 (Applause)

12 HEARING OFFICER MURPHY: Thank you, Mr.
13 Day. Joseph Pastor and then Rebecca Ferris. Is Joseph
14 Pastor still here this evening? Rebecca Ferris? Yes,
15 ma'am. After that it will be Piper Martin. Please, be
16 careful of the cables.

17 MS. FERRIS: As grateful as I am to have
18 the opportunity to speak to DEQ tonight and I have to
19 say that I would rather be just about anywhere than
20 standing right here addressing this group, believe me,
21 but I am driven by a desire to protect my life and to
22 protect my home and to protect your lives and to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 protect your homes.

2 I am the person that Mr. Murphy mentioned
3 as being the regular citizen last night. I am that
4 person. I spent the day today -- as some of you who
5 were here last night know, that I asked a question
6 about what happens when -- you know, all the stuff
7 about heat in the water and everything that everybody
8 has been talking about tonight, what I have found out
9 is that that heat issue is so important because it's
10 very critical to make sure that those reactors don't
11 overheat.

12 And so I asked a question last night about
13 what happens if the, you know, system fails. Well,
14 there is a backup. Okay, get that, that's good. What
15 happens if the backup fails? Well, those of you who
16 were here last night know that my question wasn't
17 answered. So I spent the day today on the Internet as
18 much as I could trying to find out the answers to this
19 and there was so much information.

20 I ended up calling the Nuclear Regulatory
21 Commission and I had a conversation for over an hour
22 with one of their representatives who was so kind to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 give me that time, and he gave me permission tonight to
2 use his remarks so I will be sharing those with you.

3 The journey that has led me to this place
4 right now started three years ago when Dominion first
5 applied for these two new plants, and I was concerned
6 because I don't hear the talk about conservation. I
7 don't hear the talk about energy efficiency that I
8 think we should be looking at first before we, you
9 know, drill offshore or build new nuclear power plants.

10 So I went to a meeting and there I heard
11 something that blew my mind. There is no magic in the
12 atom to create electricity. All it does is create
13 enormous amounts of heat, way beyond the 212 degrees
14 that are needed to boil water. And then it turns water
15 into steam and then the steam turns turbines and the
16 turbines generate electricity just like we started 150
17 years ago to do. The same process, only it comes with
18 all these concomitant problems.

19 What I was asking Mr. Brunell today was to
20 explain to me what happens if all the systems don't
21 work, and he was kind enough to explain to me that what
22 happens is called a meltdown and that is because the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 whole system melts through and, actually, it could melt
2 through the flooring of the containment areas and it
3 can melt down onto the ground, he told me, and it would
4 contaminate the whole ground, he told me, and then he
5 said it would go into the ground water itself.

6 And he told me that these contaminants
7 last for hundreds of thousands of years. And he told
8 me that as that melting is going on, there would be a
9 plume that would go up from the plant that would be
10 enormous and that the people that live 10 miles from
11 the plant, and that's a lot of you all that was here
12 tonight, it was breaking my heart tonight when I was
13 looking at your faces, because he said that you live in
14 the area.

15 And I am again using his exact words. You
16 are living in the area of what he called immediate
17 health, oh, boy, immediate health -- oh, I can't find
18 it, sorry, immediate health problem or something like
19 that. I was like, okay, what is an immediate health
20 problem? And it took a long time to get to it, but he
21 is talking about in a 10 mile zone that the people
22 would die and he said those words to me. Are we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 talking about death, Mr. Brunell? Yes, we're talking
2 about death.

3 And some of you talked about property
4 values tonight. You want to know what your property is
5 going to be worth in Louisa County when this happens?
6 Who is going to want to buy your property, because this
7 plume goes up and these radioactive isotopes, he told
8 me, can become water soluble. They are in the air.
9 They touch the water and they will come down and cover
10 our soil and cover our homes and cover our properties.

11 And we will be -- I live 50 miles from
12 here, so I'm in another zone. I get like a couple of
13 weeks to live and die of radiation sickness. This is
14 according to Mr. Brunell. And then my soil, my
15 property, my home, my air, my food, my water supply,
16 and this is where DEQ comes in, is contaminated and
17 there is -- really, we're talking about hundreds of
18 thousands of years for this.

19 So I ask DEQ to have some more of those
20 meetings. That is what we really want, more meetings
21 downstream from this. And I ask you to not be fooled
22 by the euphemisms, to ask those hard questions. I had

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 to keep asking and asking and asking and asking today
2 to have him get down to the truth and say we are
3 talking about death and destruction for hundreds of
4 thousands of years if things don't go right.

5 So I ask you to do that, to stick with
6 those questions, ask them over and over and over from
7 every direction until they get down to the bottom line,
8 which is that this end game is not supporting of life.

9 It is death.

10 (Applause)

11 HEARING OFFICER MURPHY: Piper Martin and
12 then Chris Lloyd. Piper Martin?

13 PARTICIPANT: I think he is gone.

14 HEARING OFFICER MURPHY: Chris Lloyd and
15 our final registered speaker, unless I don't call your
16 name and you thought you had registered, would be Jason
17 Prior. Ms. Lloyd, please, be careful of the cables.

18 MS. LLOYD: Good evening, everyone. My
19 name is Chris Lloyd. I am from Louisa and back in the
20 '70s, as everybody knows, nuclear power was the thing,
21 we were going to all be saved by it. My husband joined
22 the U.S. Navy and became a machinist's mate, nuclear.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 In 1981 I came to Louisa, fell in love with it, thought
2 the best of Louisa, thought the best of Virginia Power
3 at that time and continued on that quest.

4 Well, as I grew and learned and worked at
5 North Anna myself, found that there were other
6 problems, but we have to learn to live with those
7 things. One problem that happened just last year,
8 there was a leak in the holding pool so that could be
9 something that will happen again. Where the
10 contaminants went, I don't know.

11 The second thing is that once you go into
12 construction for these new plants, are you going to
13 have construction waste which is going to be part of
14 Louisa County Landfill? So I don't know how many cubic
15 yards, cubic miles, tonnage and so forth that will be
16 going into our landfill.

17 Over the life of the plants that are there
18 right now, moving on to their 30th anniversary real
19 soon, we have been putting low level radiation products
20 into our landfill. These are with the wipes for the
21 floors and our swabs for the health physics people and
22 so forth, and they are going into your landfill.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Whether there has ever been any testing of the water
2 supplies over around our landfill, I don't know.
3 Something that you might want to look into.

4 We also have -- someone had asked in
5 regards to why Dominion Resources is doing what they
6 are doing. Well, the Secretary of Energy at his
7 meeting with Congress, there is a \$1.1 billion check
8 attached to the first four companies that get their
9 permit. It doesn't mean they are going to do any
10 construction. It doesn't mean that they are going to
11 do anything, but you also have to look at that there
12 are these plants out there and they are going to be
13 running out of time one day.

14 So are you going to replace them? Are you
15 going to refit them? What are you going to do with
16 them? Are you going to plant flowers in them? I don't
17 know, but you have to either come up with an idea on
18 what you're going to do with them and whether you're
19 going to replace them or not. And that is going to
20 wind up in your ballpark also because, from what I can
21 figure out, those products that are sitting out there
22 in the plant itself will belong to the State of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Virginia and the U.S. Government.

2 So your energy is going to cost you one
3 way or the other. It's going to cost you either in
4 your taxes or it's going to cost you in your property
5 whether it's going to be valuable in 30, 40 years if
6 you don't wind up with more plants.

7 So, I mean, something is going to happen
8 as far as the approval for this. This is going to
9 happen. Your board of supervisors already said it is
10 going to happen. Your school board has already said it
11 is going to happen and, as far as the State of Virginia
12 is concerned, it is already going to happen.

13 So, I mean, you guys are fighting a losing
14 battle. This is going to happen, but I am really
15 concerned about who is going to pay for it. So, like I
16 said, they are the points that I wanted to make.

17 (Applause)

18 HEARING OFFICER MURPHY: Jason Prior and
19 then Don Myer. And if there is anyone in the room that
20 had intended to register and I haven't called your
21 name, please, let me know. Jason Prior?

22 MR. PRIOR: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 HEARING OFFICER MURPHY: Be careful of the
2 cables, sir.

3 MR. PRIOR: Okay. Thank you. One of the
4 gentlemen here this evening had the perfect question.
5 Why are we all here tonight? Has everybody forgotten
6 why the lake was built? Everybody considers it a lake,
7 which it's actually not a lake. It's a waste heatment
8 treatment facility, waste heat treatment facility, I'm
9 sorry.

10 You know, I hear all this information and
11 research that everybody has done and I wonder how many
12 hours, man hours, was wasted on this research to try
13 and fight this cooling tower and if those hours could
14 have been used to do something a little bit more
15 productive to make better means of energy, you know,
16 instead of trying to fight something that is not really
17 your fight.

18 I mean, Lake Anna is here for power
19 generation, correct, you know, and the basis of my
20 conversation here would be that for you all to fight,
21 it makes no more sense than somebody that has lived in
22 a subdivision for 20 years, has a neighbor move in and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 say, you know, your swimming pool reflects light and
2 heat into my front room. Now, I have to turn my air up
3 more so I'm going to go to the HOA and I'm going to
4 fight to get your swimming pool taken out of your
5 backyard.

6 You know, it makes no sense whatsoever to
7 try and fight something that is inevitable. Everybody
8 here used laptops to do their research, I would
9 imagine, or computers. It takes 8 pounds of coal to
10 power up a laptop. How does that make sense? Nuclear
11 power is clean, you know, and everybody is trying to
12 fight it.

13 Dominion has done a real good job at what
14 they do and the lake wouldn't be here if it wasn't for
15 them. So why try and take away something that they are
16 trying to make into a clean, reliable source of energy?

17 It just doesn't make any sense to me. That's about
18 all I have got to say. Thank you.

19 (Applause)

20 HEARING OFFICER MURPHY: Don Myer?
21 Please, be careful, sir.

22 MR. MYER: Thank you. I have just got two

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 quick questions and a show of hands for the first one.

2 Who uses energy from North Anna Nuclear Power Plant
3 down here? Who in this room does? Most everybody.
4 Okay. I guess we all have a stake in there. And then
5 my second question is if the site was designed for four
6 plants to begin with, there's only two there, what is
7 the problem with the other two?

8 (Applause)

9 HEARING OFFICER MURPHY: Thank you, Mr.
10 Myer. Mr. Myer was the last registered speaker. Is
11 there anyone else?

12 MR. PRIOR: Yes.

13 HEARING OFFICER MURPHY: 30 seconds?

14 MR. PRIOR: 30, yes, real, real quick.

15 HEARING OFFICER MURPHY: All right.
16 Everyone agreeable with that?

17 MR. PRIOR: I'm sorry. Basically, what --

18 HEARING OFFICER MURPHY: I --

19 COURT REPORTER: Sir, if you want to be on
20 the record, I need you to come up forward to the
21 microphone again. Thank you.

22 PARTICIPANT: He didn't use his full time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MR. PRIOR: Sorry about that. I got a
2 little intimidated. The point of what I was trying to
3 get across was there's a couple of other situations
4 just like what we have got here.

5 There was an elementary school that was
6 built by a coal mining plant and then after the
7 elementary school went in, they tried to regulate the
8 coal mining plant. There was an airport that was built
9 and then housing developments went up all around it,
10 and then people fought to regulate the airport.

11 How does it make sense? The main thing
12 that people have to remember is you all moved into
13 Dominion's backyard. Dominion didn't move into your
14 backyard.

15 (Applause)

16 HEARING OFFICER MURPHY: Thank you,
17 everyone. I appreciate everyone's patience tonight.
18 Is there anyone that had intended to register and we
19 didn't call your name? I appreciate everybody's
20 patience. I, again, thank you all for coming out
21 tonight and enduring the temperature that was a
22 challenge in and of itself.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 Having seen no one else registered to
2 speak, I am going to call the public hearing -- I'm
3 going to adjourn the public hearing at this time. And,
4 again, thank you and drive safely.

5 (Applause)

6 (Whereupon, the meeting was concluded at
7 10:18 p.m.)
8
9
10

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701